

CLAIMS

1. **A method for identifying, generating and/or producing an ABP** that specifically binds to a C2-type immunoglobulin-like (IgC2) domain of IGSF11 (VSIG3) protein or a variant thereof, the method comprising the use of such IgC2 domain of IGSF11 (or variant or epitope thereof): (i) to screen a display library of a plurality of ABPs; or
5 (ii) to immunise an animal, in particular a mammal,

wherein, the use comprises the use of a protein that comprises at least one epitope of (or comprised in) the IgC2 domain of IGSF11 (or variant thereof) and does not comprise an IgV domain of IGSF11 or a variant or epitope thereof; or

wherein, the use comprises the uses of a nucleic acid that encodes a protein that comprises at least one epitope of
10 (or comprised in) the IgC2 domain of IGSF11 (or variant thereof) and does not encode a protein that comprises an IgV domain of IGSF11 or a variant or epitope thereof.

2. The method of claim 1, comprising the steps of:

X):

- 15 • screening a display library, in particular a phage display library, that displays a plurality of ABPs with the protein; and
- identifying an ABP that specifically binds to the IgC2 domain of IGSF11 or variant thereof, or

(Y):

- administering to the animal an immunisation composition comprising the protein or the nucleic acid, and optionally together with a pharmaceutically acceptable carrier and/or excipient; and
- 20 • isolating from the animal: (i) sera that comprises an ABP that specifically binds to the IgC2 domain of IGSF11 or variant thereof; and/or (ii) B cells that express an ABP that specifically binds the IgC2 domain of IGSF11 or variant thereof, and

further comprising the step of isolating, in particular purifying, an ABP that specifically binds to the IgC2 domain of IGSF11 or variant thereof.

25 **3. A method for identifying and/or characterising an ABP as one specifically binding to a C2-type immunoglobulin-like (IgC2) domain of IGSF11 (VSIG3) protein or a variant thereof**, the method comprising the step of:

- detecting binding of the ABP to an epitope of (or comprised in) the IgC2 domain of IGSF11 protein (or variant thereof),
- 30 thereby identifying and/or characterising the ABP as one that specifically binds to the IgC2 domain of IGSF11 protein, or variant thereof.

4. The method of claim 3, further comprising the step of:

- testing for binding of the ABP to an epitope of (or comprised in) an IgV domain of IGSF11 protein or, optionally, a variant thereof,
- 35 wherein, absence of detectable binding of the ABP to the epitope of (or comprised in) such IgV domain of IGSF11 protein (or variant thereof) further characterises the ABP as one that specifically binds to the IgC2 domain of IGSF11 protein, or variant thereof.

5. The method of claim 3 or 4, wherein:

- the detecting step of claim 3 comprises detecting binding of the ABP to a first test protein, wherein the first test protein: (i) comprises the IgC2 domain of IGSF11 or a variant or fragment of such domain; and (ii) does not comprise the IgV domain of IGSF11 or, optionally, a variant thereof; and/or

5 • the testing step of claim 4 comprises testing for binding of the ABP to a second test protein, wherein the second test protein: (a) comprises the IgV domain of IGSF11 or a variant or fragment of such domain; and (b) does not comprise the IgC2 domain of IGSF11 or a variant or fragment of such domain

6. The method of claim 5, wherein:

10 • the first test protein does not comprise an IgV domain of IGSF11 or a variant or fragment of such domain; and/or

- the second test protein comprises the IgV domain of IGSF11 or, optionally, a variant thereof.

7. The method of any one of claims claim 1 to 6, wherein the ABP that that specifically binds to the IgC2 domain of IGSF11 a variant thereof is, in particular further and/or thereby identified and/or characterised as, one for use in medicine.

15 8. The method of any one of claims claim 1 to 7, comprising the step of determining whether such ABP is able to enhance or increase killing and/or lysis of tumour cells, preferably cancer cells or cells; and in particular of whether such ABP is an anti-tumour ABP and/or is able to inhibit tumour growth in-vivo, preferably in a murine model of cancer.

20 ~~9. The method of claim 8, wherein an ABP determined to have such (functional) characteristic (or characteristics) is thereby determined as one that is for use in medicine.~~

~~10. The method of claim 9 further comprising the steps of producing (or having produced) an isolated ABP determined to have such (functional) characteristic (or characteristics), and formulating (or having formulated) said ABP as a pharmaceutical composition.~~

25 **119. An isolated antigen binding protein (ABP)** which specifically binds to a C2-type immunoglobulin-like (IgC2) domain of IGSF11 (VSIG3) protein or a variant thereof, and wherein the isolated ABP comprises at least one complementarity determining region (CDR) and, optionally, is able to inhibit the binding of an interacting protein to IGSF11 protein or to an IgC2 domain of IGSF11 protein or, in either case, a variant thereof; *optionally*,

with the proviso that the ABP is not one or more of:

30 (A) one or more of an antibody, or an antigen binding fragment thereof, composed of at least one, preferably two, antibody heavy chain sequence, and at least one, preferably two, antibody light chain sequence, wherein the antibody heavy chain sequence and the antibody light chain sequence each comprises a variable region sequence in a combination of heavy and light chain variable domain shown selected from any of the variable chain combinations Chains-A-001 to Chains-A-037 as described in Table C; and/or

35 (B) one or more of an antibody, or an antigen binding fragment thereof, composed of at least one, preferably two, antibody heavy chain sequence, and at least one, preferably two, antibody light chain sequence, wherein the antibody heavy chain sequence and the antibody light chain sequence each comprises a variable region sequence in a combination of heavy and light chain variable domain shown selected from any of the variable chain combinations Chains-B-001 to Chains-B-008 as described in
40 Table C.1.

~~1210.~~ The isolated ABP of claim ~~11-9~~ comprising at least one CDR3 having an amino acid sequence with at least 90% sequence identity to, or having no more than three or two, preferably no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, a sequence selected from SEQ ID Nos.: 403, 407, 413, 417, 423, 427, 433, 437, 443, 447, 483, 487, 493, 497, 513, 517, 523, 527, 533, 537, 563, 567, 593, 597, 603, 607, 613 and 617.

~~1311.~~ The isolated ABP of claim ~~11-9~~ or ~~12-10~~ comprising at least one (heavy chain) complementarity determining region 3 (CDR3) having an amino acid sequence with at least 90% sequence identity to, or having no more than three or two, preferably no more than one amino acid substitution(s), deletion(s) or insertion(s) (in particular, substitution(s)) compared to a sequence selected from those (heavy chain) CDR3 sequences selected from any one sequence of the group consisting of SEQ ID NO: 403, 413, 423, 433, 443, 483, 493, 513, 523, 533, 563, 593, 603, and 613 (preferably compared to SEQ ID NO: 413 or 433).

~~1412.~~ The isolated ABP of any one of claims ~~11-9~~ to ~~1311~~, further comprising at least one (heavy chain) CDR1 and at least one (heavy chain) CDR2, such as one from an antibody, in particular from a human antibody.

~~1513.~~ The isolated ABP of claim ~~1412~~, wherein the least one (heavy chain) CDR1 and the at least one (heavy chain) CDR2, have an amino acid sequence with no more than five or four, such as having no more than three or two, preferably no more than one amino acid substitution(s), deletion(s) or insertion(s) (in particular, substitution(s)) compared to, a sequence selected from the corresponding (heavy chain) CDR1 and (heavy chain) CDR2 sequences shown in Table 13.1A or Table 13.3.

~~1614.~~ The isolated ABP of any one of claims ~~11-9~~ to ~~1513~~, comprising an antibody heavy chain variable region CDR1, CDR2, and CDR3, and an antibody light chain variable region CDR1, CDR2, and CDR3.

~~1715.~~ The isolated ABP of any one of claims ~~11-9~~ to ~~1614~~, which is an antibody or antigen binding fragment thereof.

~~18.~~ The isolated ABP of any one of claims 11 to 17, wherein the ABP is an antibody, or an antigen binding fragment thereof, composed of at least one, preferably two, antibody heavy chain sequences, and at least one, preferably two, antibody light chain sequences, wherein at least one, preferably both, of the antibody heavy chain sequences and at least one, preferably both, of the antibody light chain sequences comprise CDR1 to CDR3 sequences in a combination selected from any of the following combinations of heavy and/or light chain CDRs: CDRs-C-002, CDRs-C-003, CDRs-C-004, CDRs-C-005, CDRs-C-006, CDRs-C-010, CDRs-C-011, CDRs-C-013, CDRs-C-014, CDRs-C-015, CDRs-C-018, CDRs-C-021, CDRs-C-022 and CDRs-C-023,

Combination (ID)	Heavy-Chain CDR1 to CDR3 (SEQ ID NO)			Light-Chain CDR1 to CDR3 (SEQ ID NO)		
CDRs-C-002	401	402	403	405	406	407
CDRs-C-003	411	412	413	415	416	417
CDRs-C-004	421	422	423	425	426	427
CDRs-C-005	431	432	433	435	436	437
CDRs-C-006	441	442	443	445	446	447
CDRs-C-010	481	482	483	485	486	487
CDRs-C-011	491	492	493	495	496	497
CDRs-C-013	511	512	513	515	516	517
CDRs-C-014	521	522	523	525	526	527
CDRs-C-015	531	532	533	535	536	537
CDRs-C-018	561	562	563	565	566	567

CDRs-C-021	591	592	593	595	596	597
CDRs-C-022	601	602	603	605	606	607
CDRs-C-023	611	612	613	615	616	617

in each case independently, optionally with no more than three or two, preferably no more than one, amino acid substitution(s), insertion(s) or deletion(s) compared to these sequences.

19. — The isolated ABP of any one of claims 11 to 18, wherein the ABP is an antibody, or an antigen binding fragment thereof, composed of at least one, preferably two, antibody heavy chain sequences, and at least one, preferably two, antibody light chain sequences, wherein at least one, preferably both, of the antibody heavy chain sequences each comprises heavy chain CDR1 to CDR3 sequences in the combination CDRs-C-003 or CDRs-C-004, or in the combination CDRs-C-005, and at least one, preferably both, of the antibody light chain sequences each comprises light chain CDR1 to CDR3 sequences in the combination, respectively, CDRs-C-003 or CDRs-C-004, or in the combination CDRs-C-005, in each case independently, optionally with no more than one amino acid substitution(s), insertion(s) or deletion(s) compared to these sequences, and preferably wherein the ABP is able to inhibit the binding of the interacting protein to IGSF11 protein or to the IgC2 domain of IGSF11 protein or, in either case, a variant thereof, with an IC50 of 50nM or 10nM or less.

20. — The isolated ABP of any one of claims 11 to 17, wherein the ABP is an antibody, or an antigen binding fragment thereof, composed of at least one, preferably two, antibody heavy chain sequences, and at least one, preferably two, antibody light chain sequences, wherein

(A) the at least one, preferably two, antibody heavy chain sequences comprise (i) an antibody heavy chain CDR3 having not more than one amino acid substitution, insertion or deletion compared to a heavy chain CDR3 sequence selected from the group consisting of SEQ ID NO: 403, 413, 423, 433, 443, 483, 493, 513, 523, 533, 563, 593, 603, and 613 (preferably compared to SEQ ID NO: 413 or 433); and comprise (ii) an antibody heavy chain CDR1 having no more than five or four, amino acid substitution(s), deletion(s) or insertion(s) (in particular, substitution(s)) compared to, a sequence selected from SEQ ID NOs. 401, 411, 421, 431, 441, 481, 491, 511, 521, 531, 561, 591, 601, and 611 (preferably compared to SEQ ID NO: 411 or 431)); and comprise (iii) an antibody heavy chain CDR2 having no more than five or four amino acid substitution(s), deletion(s) or insertion(s) (in particular, substitution(s)) compared to, a sequence selected from SEQ ID NOs. 402, 412, 422, 432, 442, 482, 492, 512, 522, 532, 562, 592, 602, and 612 (preferably compared to SEQ ID NO: 412 or 432);

(B) the at least one, preferably two, antibody light chain sequences comprise (i) an antibody light chain CDR3 having no more than eight, seven, six, five or four, such as having no more than three or two, amino acid substitution(s), deletion(s) or insertion(s) compared to, the light chain CDR3 sequence selected from the group consisting of SEQ ID NO: 407, 417, 427, 437, 447, 487, 497, 517, 527, 537, 567, 597, 607, and 617 (preferably compared to SEQ ID NO: 417 or 437); and comprise (ii) an antibody light chain CDR1 having no more than one amino acid substitution, deletion or insertion (in particular, substitution) compared to, a sequence selected from SEQ ID NOs. 405, 415, 425, 435, 445, 485, 495, 515, 525, 535, 565, 595, 605, and 615 (preferably compared to SEQ ID NO: 415 or 435)); and comprise (iii) an antibody light chain CDR2 having no more than one amino acid substitution, deletion or insertion (in particular, substitution) compared to, a sequence selected from SEQ ID NOs. 406, 416, 426, 436, 446, 486, 496, 516, 526, 536, 566, 596, 606, and 616 (preferably compared to SEQ ID NO: 416 or 436).

- 21. The isolated ABP of any one of claims 11 to 20, wherein the ABP is an antibody, or an antigen binding fragment thereof, composed of at least one, preferably two, antibody heavy chain sequences, and at least one, preferably two, antibody light chain sequences, wherein:
- 5 —(X) the at least one, preferably two, antibody heavy chain sequence comprises a variable region sequence selected from the sequences according to SEQ ID NO: 414 or 434, and wherein the least one, preferably two, antibody light chain sequence comprises a light chain variable domain shown in **Table C.2**; in each case independently, optionally with no more than fifteen, fourteen, thirteen, twelve or eleven (eg, for variable light chain), or with no more than about 20, 18, 16, 14 or 12, or no more than ten, nine, eight, seven, six, five, four, preferably no more than three, two or one, amino acid substitution(s), insertion(s) or deletion(s) (in particular, substitution(s)) compared to these sequences; and/or
- 10 —(Y) the at least one, preferably two, antibody light chain sequence comprises a variable region sequence selected from the sequences according to SEQ ID NO: 418 or 438; and wherein the least one, preferably two, antibody heavy chain sequence comprises a heavy chain variable domain shown in **Table C.2**; in each case independently, optionally with no more than fifteen, fourteen, thirteen, twelve or eleven (eg, for variable light chain), or with no more than about 20, 18, 16, 14 or 12, or no more than ten, nine, eight, seven, six, five, four, preferably no more than three, two or one, amino acid substitution(s), insertion(s) or deletion(s) (in particular, substitution(s)) compared to these sequences.

2216. The isolated ABP of any one of claims 11-9 to 2115, wherein the ABP is an antibody, or an antigen binding fragment thereof, composed of at least one, preferably two, antibody heavy chain sequences, and at least one, preferably two, antibody light chain sequences, wherein at least one, preferably both, of the antibody heavy chain sequences and at least one, preferably both, of the antibody light chain sequences comprise CDR1 to CDR3 sequences in a combination selected from any of the following combinations of heavy and/or light chain CDRs, CDRs-D-101 to CDRs-D-116 and CDRs-D-201 to CDRs-D-223:

Combination (ID)	Heavy Chain CDR1-CDR3 (SEQ ID NO)			Light Chain CDR1-CDR3 (SEQ ID NO)		
CDRs-D-101	681	682	683	685	686	687
CDRs-D-102	691	692	693	695	696	697
CDRs-D-103	701	702	703	705	706	707
CDRs-D-104	711	712	713	715	716	717
CDRs-D-105	721	722	723	725	726	727
CDRs-D-106	731	732	733	735	736	737
CDRs-D-107	741	742	743	745	746	747
CDRs-D-108	751	752	753	755	756	757
CDRs-D-109	761	762	763	765	766	767
CDRs-D-110	771	772	773	775	776	777
CDRs-D-111	781	782	783	785	786	787
CDRs-D-112	791	792	793	795	796	797
CDRs-D-113	801	802	803	805	806	807
CDRs-D-114	811	812	813	815	816	817
CDRs-D-115	821	822	823	825	826	827
CDRs-D-116	831	832	833	835	836	837
CDRs-D-201	841	842	843	845	846	847

CDRs-D-202	851	852	853	855	856	857
CDRs-D-203	861	862	863	865	866	867
CDRs-D-204	871	872	873	875	876	877
CDRs-D-205	881	882	883	885	886	887
CDRs-D-206	891	892	893	895	896	897
CDRs-D-207	901	902	903	905	906	907
CDRs-D-208	911	912	913	915	916	917
CDRs-D-209	921	922	923	925	926	927
CDRs-D-210	931	932	933	935	936	937
CDRs-D-211	941	942	943	945	946	947
CDRs-D-212	951	952	953	955	956	957
CDRs-D-213	961	962	963	965	966	967
CDRs-D-214	971	972	973	975	976	977
CDRs-D-215	981	982	983	985	986	987
CDRs-D-216	991	992	993	995	996	997
CDRs-D-217	1001	1002	1003	1005	1006	1007
CDRs-D-218	1011	1012	1013	1015	1016	1017
CDRs-D-219	1021	1022	1023	1025	1026	1027
CDRs-D-220	1031	1032	1033	1035	1036	1037
CDRs-D-221	1041	1042	1043	1045	1046	1047
CDRs-D-222	1051	1052	1053	1055	1056	1057
CDRs-D-223	1061	1062	1063	1065	1066	1067

in each case independently, optionally with no more than three or two, preferably no more than one, amino acid substitution(s), insertion(s) or deletion(s) compared to these sequences.

23. ~~The isolated ABP of any one of claims 11 to 22, wherein the ABP comprises:~~

5 ~~• an antibody heavy chain sequence comprising a heavy chain variable domain sequence of SEQ ID Nos: 414, optionally with no more than ten, nine, eight, seven, six, five, four, preferably no more than three, two or one, amino acid substitution(s), insertion(s) or deletion(s) compared to this sequence, or an antigen binding fragment thereof, wherein the antibody heavy chain sequence or antigen binding fragment thereof comprises:~~

~~— a CDR3 having the heavy chain CDR3 sequence SEQ ID No: 413, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, the heavy chain CDR3 sequence SEQ ID No: 413;~~

10 ~~— a CDR1 having the heavy chain CDR1 sequence SEQ ID No: 411, or having no more than four or three, such as having no more than two or one, amino acid substitution(s), deletion(s) or insertion(s) compared to, the heavy chain CDR1 sequence SEQ ID No: 411; and~~

15 ~~— a CDR2 having the heavy chain CDR2 SEQ ID No: 412, or having no more than five or four, or three, such as having no more than three or two, or having no more than one, amino acid substitution(s), deletion(s) or insertion(s) compared to, the heavy chain CDR2 SEQ ID No: 412, and~~

~~• an antibody light chain sequence comprising a light chain variable domain sequence of SEQ ID Nos: 418, optionally with no more than ten, nine, eight, seven, six, five, four, preferably no more than three, two or one, amino acid substitution(s), insertion(s) or deletion(s) compared to this sequence, or an antigen binding fragment thereof, wherein the antibody light chain sequence or antigen binding fragment thereof comprises:~~

20 ~~— a CDR3 having the light chain CDR3 sequence SEQ ID No: 417, or having no more than nine, eight, seven,~~

six, five or four, such as having no more than three or two, or having no more than one, amino acid substitution(s), deletion(s) or insertion(s) compared to, the light chain CDR3 sequence SEQ ID No: 417;

———— a CDR1 having the light chain CDR1 sequence SEQ ID No: 415, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, the light chain CDR1 sequence SEQ ID No: 415; and

5 ——— a CDR2 having the light chain CDR2 sequence SEQ ID No: 416, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, the light chain CDR2 sequence SEQ ID No: 416.

24. — The isolated ABP of any one of claims 11 to 22, wherein the ABP comprises:

10 • — an antibody heavy chain sequence comprising a heavy chain variable domain sequence of SEQ ID Nos: 434, optionally with no more than ten, nine, eight, seven, six, five, four, preferably no more than three, two or one, amino acid substitution(s), insertion(s) or deletion(s) compared to this sequence, or an antigen binding fragment thereof, wherein the antibody heavy chain sequence or antigen binding fragment thereof comprises:

———— a CDR3 having the heavy chain CDR3 sequence SEQ ID No: 433, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, the heavy chain CDR3 sequence SEQ ID No: 433;

15 ——— a CDR1 having the heavy chain CDR1 sequence SEQ ID No: 431, or having no more than three or two, or having no more than one, amino acid substitution(s), deletion(s) or insertion(s) compared to, the heavy chain CDR1 sequence SEQ ID No: 431; and

———— a CDR2 having the heavy chain CDR2 SEQ ID No: 432, or having no more than nine, eight, seven, six, five or four, such as having no more than three or two, or having no more than one, amino acid substitution(s), deletion(s) or insertion(s) compared to, the heavy chain CDR2 SEQ ID No: 432, and

20 • — an antibody light chain sequence comprising a light chain variable domain sequence of SEQ ID Nos: 438, optionally with no more than ten, nine, eight, seven, six, five, four, preferably no more than three, two or one, amino acid substitution(s), insertion(s) or deletion(s) compared to this sequence, or an antigen binding fragment thereof, wherein the antibody light chain sequence or antigen binding fragment thereof comprises:

25 ——— a CDR3 having the light chain CDR3 sequence SEQ ID No: 437, or having no more than six, or five or four, such as having no more than three or two, or having no more than one, amino acid substitution(s), deletion(s) or insertion(s) compared to, the light chain CDR3 sequence SEQ ID No: 437;

———— a CDR1 having the light chain CDR1 sequence SEQ ID No: 435, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, the light chain CDR1 sequence SEQ ID No: 435; and

30 ——— a CDR2 having the light chain CDR2 sequence SEQ ID No: 436, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, the light chain CDR2 sequence SEQ ID No: 436.

25. — The isolated ABP of any one of claims 1 to 24, wherein the ABP is an antibody, or an antigen binding fragment thereof, composed of at least one, preferably two, antibody heavy chain sequences, and at least one, preferably two, antibody light chain sequences, wherein at least one, preferably both, of the antibody heavy chain sequences each comprises heavy chain CDR1 to CDR3 sequences in the combination CDRs D-114 or CDRs D-222, in each case independently, optionally with no more than one amino acid substitution(s), insertion(s) or deletion(s) compared to these sequences, and preferably wherein the ABP is able to inhibit the binding of the interacting protein to IGSF11 protein or to the IgC2 domain of IGSF11 protein or, in either case, a variant thereof, with an IC50 of 50nM or 10nM, or 0,5nM or less, preferably as measured according to example 13 herein.

26. — The isolated ABP of any one of claims 11 to 25, wherein the ABP is an antibody, or an antigen binding fragment thereof, composed of at least one, preferably two, antibody heavy chain sequences, and at least one,

~~preferably two, antibody light chain sequences, wherein at least one, preferably both, of the antibody light chain sequences each comprises heavy chain CDR1 to CDR3 sequences in the combination CDRs D-114 or CDRs D-222, in each case independently, optionally with no more than one amino acid substitution(s), insertion(s) or deletion(s) compared to these sequences, and preferably wherein the ABP is able to inhibit the binding of the interacting protein to IGSF11 protein or to the IgC2 domain of IGSF11 protein or, in either case, a variant thereof, with an IC50 of 50nM or 10nM, or 0,5nM or less, preferably as measured according to example 13 herein.~~

~~27. The isolated ABP of any one of claims 11 to 28, wherein the ABP is an antibody, or an antigen binding fragment thereof, composed of at least one, preferably two, antibody heavy chain sequences, and at least one, preferably two, antibody light chain sequences, wherein at least one, preferably both, of the antibody heavy chain sequences each comprises heavy chain CDR1 to CDR3 sequences in the combination CDRs D-114 or CDRs D-222, and at least one, preferably both, of the antibody light chain sequences each comprises light chain CDR1 to CDR3 sequences in the combination, respectively, CDRs D-114 or CDRs D-222, in each case independently, optionally with no more than one amino acid substitution(s), insertion(s) or deletion(s) compared to these sequences, and preferably wherein the ABP is able to inhibit the binding of the interacting protein to IGSF11 protein or to the IgV domain of IGSF11 protein or, in either case, a variant thereof, with an IC50 of 50nM or 10nM, or 0,5nM or less, preferably as measured according to example 13 herein.~~

~~28~~17. The isolated ABP of any one of claims ~~11-9~~ to ~~27~~16, wherein the ABP comprises:

- an antibody heavy chain sequence comprising a heavy chain variable domain sequence of SEQ ID Nos: 814, optionally with no more than ten, nine, eight, seven, six, five, four, preferably no more than three, two or one, amino acid substitution(s), insertion(s) or deletion(s) compared to this sequence, or an antigen binding fragment thereof, wherein the antibody heavy chain sequence or antigen binding fragment thereof comprises:
 - a CDR3 having the heavy chain CDR3 sequence SEQ ID No: 813, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the heavy chain CDR3 sequence SEQ ID No: 813;
 - a CDR1 having the heavy chain CDR1 sequence SEQ ID No: 811, or having no more than four, three or two, or having no more than one, amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the heavy chain CDR1 sequence SEQ ID No: 811; and
 - a CDR2 having the heavy chain CDR2 SEQ ID No: 812, or having no more than five or four, such as having no more than three or two, or having no more than one, amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the heavy chain CDR2 SEQ ID No: 812, and
- an antibody light chain sequence comprising a light chain variable domain sequence of SEQ ID Nos: 818, optionally with no more than ten, nine, eight, seven, six, five, four, preferably no more than three, two or one, amino acid substitution(s), insertion(s) or deletion(s) compared to this sequence, or an antigen binding fragment thereof, wherein the antibody light chain sequence or antigen binding fragment thereof comprises:
 - a CDR3 having the light chain CDR3 sequence SEQ ID No: 817, or having no more than nine, eight, seven, six, or five, such as having no more than four, three or two, or having no more than one, amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the light chain

CDR3 sequence SEQ ID No: 817;

- a CDR1 having the light chain CDR1 sequence SEQ ID No: 815, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the light chain CDR1 sequence SEQ ID No: 815; and
- a CDR2 having the light chain CDR2 sequence SEQ ID No: 816, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the light chain CDR2 sequence SEQ ID No: 816.

2918. The isolated ABP of any one of claims 11-9 to 2716, wherein the ABP comprises:

- an antibody heavy chain sequence comprising a heavy chain variable domain sequence of SEQ ID Nos: 1054, optionally with no more than ten, nine, eight, seven, six, five, four, preferably no more than three, two or one, amino acid substitution(s), insertion(s) or deletion(s) compared to this sequence, or an antigen binding fragment thereof, wherein the antibody heavy chain sequence or antigen binding fragment thereof comprises:
 - a CDR3 having the heavy chain CDR3 sequence SEQ ID No: 1053, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the heavy chain CDR3 sequence SEQ ID No: 1053;
 - a CDR1 having the heavy chain CDR1 sequence SEQ ID No: 1051, or having no more than three or two, or having no more than one, amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the heavy chain CDR1 sequence SEQ ID No: 1051; and
 - a CDR2 having the heavy chain CDR2 SEQ ID No: 1052, or having no more than nine, eight, seven, six, five, four, preferably no more than three, two or one, amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the heavy chain CDR2 SEQ ID No: 1052, and
- an antibody light chain sequence comprising a light chain variable domain sequence of SEQ ID Nos: 1058, optionally with no more than ten, nine, eight, seven, six, five, four, preferably no more than three, two or one, amino acid substitution(s), insertion(s) or deletion(s) compared to this sequence, or an antigen binding fragment thereof, wherein the antibody light chain sequence or antigen binding fragment thereof comprises:
 - a CDR3 having the light chain CDR3 sequence SEQ ID No: 1057, or having no more than six, five or four, such as having no more than three or two, or having no more than one, amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the light chain CDR3 sequence SEQ ID No: 1057;
 - a CDR1 having the light chain CDR1 sequence SEQ ID No: 1055, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the light chain CDR1 sequence SEQ ID No: 1055; and
 - a CDR2 having the light chain CDR2 sequence SEQ ID No: 1056, or having no more than one amino acid substitution(s), deletion(s) or insertion(s) compared to, and preferably having no amino acid substitution(s), insertion(s) or deletion(s) compared to, the light chain CDR2

3019. The isolated ABP according to any one of claims 1 to 2918, that binds to an IgC2 domain of IGSF11 with a KD that is less than about 1 nM, preferably less than 150 pM or less than 100 pM, even more preferably with a KD that is less than 10 pM; and optionally as measured according to example 14 herein, such as using a kinetic exclusion assay.

3120. **An isolated ABP** which competes with an ABP as recited in any one of claims 11-9 to 30-19 for binding to an IgC2 domain of IGSF11 protein or a variant thereof, and, optionally, is able to inhibit the binding of an interacting protein to IGSF11 protein or to an IgC2 domain of IGSF11 protein or, in each case, a variant thereof,

with the proviso that the isolated ABP is not one or more of:

- any ABP the subject of proviso (A) of claim 11;
- any ABP the subject of proviso (B) of claim 11.

3221. The isolated ABP of any one of claims 11-9 to 3120, wherein the interacting protein is VSIR (VISTA) protein or a variant thereof.

3322. The isolated ABP of any one of claims 11-9 to 32-21 that is able to enhance or increase killing and/or lysis of cells expressing IGSF11 or an IgC2 domain of IGSF11, or a variant thereof.

3423. The isolated ABP of any one of claims 11-9 to 33-21 that is able to enhance or increase killing and/or lysis of tumour cells, preferably cancer cell or cells that originate from a tumour cell and/or cells that express IGSF11 or an IgC2 domain of IGSF11, or a variant thereof.

~~35. The isolated ABP of any one of claims 11 to 34 that is an anti-tumour ABP.~~

3624. The isolated ABP of any one of claims 11-9 to 35-23 that is able to inhibit tumour growth in-vivo, preferably in a murine model of cancer.

3725. The isolated ABP of any one of claims 11-9 to 36-24 that enhances killing and/or lysis of cells expressing IGSF11, or a variant of IGSF11, by cytotoxic T cells and/or TILs.

3826. The isolated ABP of any one of claims 11-9 to 37-25 that (i) enhances a cell-mediated immune response, such as that mediated by an activated cytotoxic T-cell (CTL), to a mammalian cell expressing said IGSF11 or the variant of IGSF11; and/or (ii) increases immune cell, such as T-cell, activity and/or survival in the presence of a mammalian cell expressing said IGSF11 or the variant of IGSF11.

3927. The isolated ABP of any one of claims 11-9 to 38-26 that modifies the microenvironment of a tumour, in particular modulates the number and/or type of immune cells present in the tumour, and more suitably reduces the number of intra-tumoural myeloid-derived suppressor cells (MDSCs) and/or increases the number of intra-tumoural CTLs.

4028. The isolated ABP of any one of claims 11-9 to 39-27 that decreases (the number of M2) tumour-associated macrophages (TAMs) and/or increases the number of (intra-tumoural) CTLs, optionally, in each case, within the tumour microenvironment.

4129. The isolated ABP of any one of claims 11-9 to 4028, wherein the ABP is able to inhibit the binding of an interacting protein to IGSF11 protein or to an IgC domain or of IGSF11 protein or, in either case, a variant thereof; optionally with an IC50 of 50nM or 10nM or less, or preferably 0,5 nM or less.

4230. The isolated ABP of any one of claims 11-9 to 4129, wherein the ABP does not inhibit the interaction between VSIR (VISTA) protein or a variant thereof and IGSF11 protein or the IgC2 domain of IGSF11 protein or a variant thereof.

3143. The isolated ABP of any one of claims ~~11-9~~ to ~~42-30~~ that is an antibody or an antigen binding fragment thereof, wherein the antibody is a monoclonal antibody, or wherein the antigen binding fragment is a fragment of a monoclonal antibody.

3244. The isolated ABP of any one of claims ~~11-9~~ to ~~43-31~~ that is multi-specific, in particular is bi-specific (such as a bispecific T-cell engager (BiTE) ABP or antibody).

3345. The isolated ABP of any one of claims ~~11-9~~ to ~~44-32~~ that is a chimeric antigen receptor (CAR).

3446. **An isolated nucleic acid** encoding for an ABP, or for an antigen binding fragment or a monomer of an ABP, wherein the ABP is one of any one of claims ~~11-9~~ to ~~4533~~.

4735. **A recombinant host cell** comprising a nucleic acid recited in claim ~~4634~~.

4836. **A pharmaceutical composition** comprising:

(X):

(i) an ABP of any one of claims ~~11-9~~ to ~~4533~~; or

(ii) a nucleic acid recited in claim ~~46-34~~ or a recombinant host cell of claim ~~4735~~, in particular a T cell comprising a nucleic acid expressing an ABP comprising a chimeric antigen receptor (CAR); or

(iii) a compound that is an inhibitor of the expression, function, activity and/or stability of immunoglobulin superfamily member 11 (IGSF11, or VSIG3), or of a C2-type immunoglobulin-like (IgC2) domain of IGSF11 or of a variant thereof,

with the proviso that the compound is not one or more of:

- any ABP the subject of proviso (A) of claim ~~119~~;
- any ABP the subject of proviso (B) of claim ~~119~~;

(Y):

a pharmaceutically acceptable carrier, stabiliser and/or excipient.

4937. **A product for use in medicine**, wherein the product is selected from the list consisting of:

(i) an isolated ABP of any one of claims ~~11-9~~ to ~~4533~~, and

(ii) an isolated nucleic acid recited in claim ~~46-34~~ or a recombinant host cell of claim ~~4735~~, in particular T cell comprising a nucleic acid expressing an ABP comprising a chimeric antigen receptor (CAR), and

(iii) a compound that is an inhibitor of the expression, function, activity and/or stability of immunoglobulin superfamily member 11 (IGSF11, or VSIG3), or of a C2-type immunoglobulin-like (IgC2) domain of IGSF11 or of a variant thereof,

with the proviso that the compound is not one or more of:

- any ABP the subject of proviso (A) of claim ~~119~~;
- any ABP the subject of proviso (B) of claim ~~119~~;

5038. The product for use in medicine of claim ~~49-37~~ wherein the product is for use in the treatment of a proliferative disorder that is associated with the undesired presence of IGSF11-positive cells or cells positive for a variant of IGSF11 and/or that is associated with cellular resistance against a cell-mediated immune response and/or that is associated with expression or activity of IGSF11 or a variant thereof of IGSF11.

5139. The product for use in medicine of claim ~~5038~~, wherein cells involved in the proliferative disorder are resistant to a cell-mediated immune response.

5240. The product for use in medicine of any one of claims ~~49-37~~ to ~~5139~~, wherein the product is for use in enhancing an immune response in a mammalian subject, preferably for use in aiding a cell-mediated immune response in the subject such as the subject's T cell mediated immune response, for example for treating a

proliferative disease, such as a cancer disease, or for treating an infectious disease.

5341. The product for use in medicine of any one of claims 49-37 to 5240, wherein the product is for use in the treatment of a proliferative disorder resistant and/or refractory to PD1/PDL1 blockade therapy and/or to CTLA4 blockade therapy.

5442. The product for use in medicine of any one of claims 49-37 to 5341, wherein the product is for use in the treatment of a proliferative disorder in combination with a different anti-proliferative therapy.

5543. The product for use in medicine of any one of claims 49-37 to 5442, wherein the product is for use in the treatment of a cancer in combination with immunotherapy with a ligand to an immune checkpoint molecule, preferably the ligand is one that binds to an immune checkpoint molecule selected from the group consisting of: A2AR, B7-H3, B7-H4, CTLA-4, IDO, KIR, LAG3, PD-1 (or one of its ligands PD-L1 and PD-L2), TIM-3 (or its ligand galectin-9), TIGIT and VISTA.

5644. The product for use in medicine of claim 5543, wherein the ligand binds to an immune checkpoint molecule selected from CTLA-4, PD-1 and PD-L1.

5745. **An in-vitro method for determining** whether a subject has, or is at risk of, developing a disease, disorder or condition that is associated with the undesired presence of IGSF11-positive cells (or cells positive for a variant of IGSF11) and/or that is associated with cellular resistance against a cell-mediated immune response and/or that is associated with expression or activity of IGSF11 (or a variant thereof), the method comprising the step of:

- detecting a C2-type immunoglobulin-like (IgC2) domain of IGSF11 (or a variant of such domain), in particular the presence (or an amount) of or expression and/or activity of such domain of IGSF11 (or the variant thereof), in a biological sample from said subject,

wherein the detection of such domain of IGSF11 (or the variant thereof) in the sample indicates such disease, disorder or condition, or a risk of developing such disease, disorder or condition, in the subject; and optionally, wherein such domain of the IGSF11 (or variant thereof) is detected with an ABP of any one of claims 11-9 to 4533.

5846. **An in-vitro method for determining** whether a subject has, or has a risk of developing, a disease, disorder or condition that is associated with the undesired presence of IGSF11-positive cells (or cells positive for a variant of IGSF11) and/or that is associated with cellular resistance against a cell-mediated immune response and/or that is associated with expression or activity of IGSF11 (or a variant thereof), the method comprising the steps of:

- contacting cells of the subject involved with the disease, disorder or condition with an ABP of any one of claims 11 to 45, and/or with a product recited in any one of claims 49-37 to 5644, in the presence of a cell-mediated immune response, preferably wherein the cell-mediated immune response comprises immune cells selected from the group consisting of: lymphocytes, T-cells, CTLs and TILs; and
- determining the cell-mediated immune response against such cells of the subject,

wherein an enhancement of the cell-mediated immune response against such cells of the subject indicates that the subject has or has a risk of developing a disease, disorder or condition that is selected from a proliferative disorder or an infectious disease.

5947. **An in-vitro method for identifying and/or characterising** a compound suitable for the treatment of a disease, disorder or condition that is associated with the undesired presence of IGSF11-positive cells (or cells positive for a variant of IGSF11) and/or that is characterised by cellular resistance against a cell-mediated immune response and/or one that is characterised by expression or activity of IGSF11 (or a variant thereof), the method comprising the steps of:

- (a) bringing into contact a first cell expressing a protein comprising a C2-type immunoglobulin-like (IgC2) domain of IGSF11 (or a variant of such domain) and (x) the candidate compound, or (y) the candidate compound and a cell-mediated immune response, preferably wherein the cell-mediated immune response comprises immune cells selected from the group consisting of: lymphocytes, T-cells, CTLs and TILs; and
- (b) determining (i) the expression, activity, function and/or stability of the (eg protein or mRNA of) such domain of IGSF11 (or variant), in the first cell; and/or (ii) the cell-mediated immune response against the first cell,

wherein: (i) a reduced expression, activity function and/or stability of such domain of IGSF11 (or variant), in said first cell contacted with the candidate compound compared to said first cell not contacted with said candidate compound; and/or (ii) an enhancement of the cell-mediated immune response against the first cell contacted with the candidate compound compared to the cell-mediated immune response against the first cell not contacted with the candidate compound; indicates that the candidate compound is a compound suitable for the treatment of a disease, disorder or condition that is selected from a proliferative disorder or an infectious disease; and

optionally, wherein the reduction of expression, activity function and/or stability of such domain of IGSF11 (eg, induction of internalisation of IGSF11 protein or such domain of IGSF11 protein) and/or the enhancement of the cell-mediated immune response is identified by reference to a control method practised with a compound having a known effect on such expression, function, activity and/or stability, in particular a positive or negative control; and wherein the compound having a known effect on such expression, function, activity and/or stability is an ABP of any one of claims 11-9 to 45-33 and/or is a product recited in any one of claims 49-37 to 5644.

~~60. The method of claim 59, wherein the protein expressed by the first cell does not comprise the IgV domain of IGSF11.~~

~~61. A method for identifying and/or characterising an ABP as one specifically binding to a C2 type immunoglobulin-like (IgC2) domain of IGSF11 (VSIG3) protein or a variant thereof, the method comprising the step of:~~

- ~~detecting binding of the ABP to an epitope of (or comprised in) such domain of IGSF11 protein (or variant thereof);~~

~~thereby identifying and/or characterising the ABP as one that specifically binds to the IgC2 domain of IGSF11 protein, or variant thereof.~~

~~62. A method for identifying and/or characterising an ABP for use in medicine, the method comprising the steps of:~~

- ~~providing an ABP that binds to IGSF11 protein (or a variant thereof); and~~
- ~~identifying and/or characterising the provided ABP as one that specifically binds to an IgC2 domain of IGSF11 protein or a variant thereof;~~

~~thereby identifying and/or characterising the ABP for use in medicine.~~

~~6348. A method for producing~~ an ABP for use in medicine, the method comprising the steps of:

- providing a hybridoma or (host) cell capable of expressing an ABP that binds to IGSF11 protein (or a variant thereof), for example a recombinant cell line comprising at least one genetic construct comprising coding sequence(s) encoding said ABP; and
- culturing said hybridoma or host cell under conditions that allow for the expression of the ABP;
- optionally, isolating the ABP expressed by said hybridoma or host cell; and

- identifying and/or characterising the expressed ABP as one that specifically binds to an IgC2 domain of IGSF11 protein or a variant thereof, thereby producing the ABP for use in medicine.

64. ~~A use of an IgC2 domain of IGSF11 protein or a variant or fragment (eg, at least one epitope) of such domain to identify, characterise and/or produce an ABP for use in medicine, suitably wherein the ABP specifically binds to such domain of IGSF11 protein (or variant thereof).~~

65. ~~The use of claim 64, further comprising the use of an IgV domain of IGSF11 protein or, optionally, a variant thereof, suitably wherein the ABP does not bind to such domain of IGSF11 protein (or variant thereof).~~

66. ~~The use of claim 64 or 65, wherein the use comprises the use of:~~

- ~~a first test protein, wherein the test protein: (i) comprises the IgC2 domain of IGSF11 or a variant or fragment of such domain; and (ii) does not comprise an IgV domain of IGSF11 or, optionally, a variant thereof; and/or~~
- ~~a second test protein, wherein the second test protein: (a) comprises an IgV domain of IGSF11 or a variant or fragment of such domain thereof; and (b) does not comprise the IgC2 domain of IGSF11, or a fragment of such domain or, optionally, a variant thereof.~~

67. ~~The use of claim 66, wherein:~~

- ~~the first test protein does not comprise an IgV domain of IGSF11 or a variant or fragment of such domain; and/or~~
- ~~the second test protein comprises the IgV domain of IGSF11 or a variant thereof.~~

68. ~~The method of any one of claims 62 or 63, or the use of any one of claims 64 to 67, wherein the ABP for use in medicine is:-~~

- ~~an ABP for use in the treatment of a proliferative disorder that is associated with the undesired presence of IGSF11 positive cells or cells positive for a variant of IGSF11 and/or that is associated with cellular resistance against a cell mediated immune response and/or that is associated with expression or activity of IGSF11 or a variant thereof of IGSF11, suitable wherein cells involved in the proliferative disorder are resistant to a cell mediated immune response;~~
- ~~an ABP for use in enhancing an immune response in a mammalian subject, preferably for use in aiding a cell mediated immune response in a subject such as the subject's T cell mediated immune response, for example for treating a proliferative disease, such as a cancer disease, or for treating an infectious disease; and/or~~
- ~~an ABP for use in the treatment of a proliferative disorder resistant and/or refractory to PD1/PDL1 and/or CTLA4 blockade therapy.~~

69. ~~The method of any one of claims 62, 63 or 68, or the use of any one of claims 64 to 67, wherein the ABP:~~

- ~~is capable of enhancing or increasing killing and/or lysis of cells expressing IGSF11 or an IgC2 domain (or IgV domain) of IGSF11, or a variant thereof;~~
- ~~is capable of enhancing or increasing killing and/or lysis of tumour cells, preferably cancer cell or cells that originate from a tumour cell and/or cells that express IGSF11 or an IgC2 domain (or IgV domain) of IGSF11, or a variant thereof;~~
- ~~is a therapeutic antibody able to treat, ameliorate and/or delay progression of a disease, disorder or condition, in particular a disease, disorder or condition mentioned herein elsewhere;~~
- ~~is an anti tumour antibody;~~
- ~~is capable of inhibiting tumour growth in vivo, preferably in a murine model of cancer;~~

- is able to inhibit the binding of an interacting protein to IGSF11 protein or a variant thereof, suitably: (i) wherein the interacting protein is VSIR (VISTA) protein or a variant thereof; or, alternatively (ii) wherein the interacting protein is not VSIR (VISTA) protein or a variant thereof;
 - is able to inhibit (eg, inhibits) the interaction between VSIR (VISTA) protein or a variant thereof and the IgC2 domain (or the IgV domain) of IGSF11 protein or a variant thereof or, alternatively (ii) is not able to inhibit (eg, does not inhibit) the interaction between VSIR (VISTA) protein or a variant thereof and the IgC2 domain (or the IgV domain) of IGSF11 protein or a variant thereof;
 - enhances killing and/or lysis of cells expressing IGSF11, or a variant of IGSF11, by cytotoxic T cells and/or TIL;
 - enhances a cell-mediated immune response, such as that mediated by an activated cytotoxic T-cell (CTL), to a mammalian cell expressing said IGSF11 or the variant of IGSF11;
 - increases immune cell, such as T cell, activity and/or survival in the presence of a mammalian cell expressing said IGSF11 or the variant of IGSF11;
 - modifies the microenvironment of a tumour, suitably increases the number and/or type of immune cells present in the tumour, and more suitably reduces the number of intra-tumoural MDSCs and/or increases the number of intra-tumoural CTLs;
 - recruits and/or activates NK cells and/or mediates antibody-dependent cellular cytotoxicity (ADCC);
 - recruits and/or activates macrophages and/or mediates antibody-dependent cellular phagocytosis (ADCP);
 - recruits complement and/or mediates complement-dependent cytotoxicity (CDC); and/or
 - decreases (the number of) M2 tumour-associated macrophages (TAMs) and/or increases the number of (intra-tumoural) CTLs, optionally, in each case, within the tumour microenvironment; and/or
 - induces internalisation of IGSF11 protein from the surface of cells (such as tumour cells that express IGSF11).
70. The method of any one of claims 62, 63, 68 or 69, or the use of any one of claims 64 to 69, further comprising the step of: determining or having determined, that the ABP has one or more of the functional characteristics as set forth in any one of claims 30 to 42 or claim 69.
71. The method of any one of claims 62, 63, 68 to 70, or the use of any one of claims 64 to 70, wherein the ABP is an antibody, or an antigen-binding fragment thereof, such as a monoclonal antibody, or wherein the antigen-binding fragment is a fragment of a monoclonal antibody.
72. The method or use of claim 71, wherein the antibody is a human antibody a humanised antibody or a chimeric human antibody, or wherein the antigen-binding fragment is a fragment of a human antibody a humanised antibody or a chimeric human antibody.
73. **A method for treating** a subject in need thereof, said treatment comprising inhibiting the interaction between IGSF11 protein and an interacting protein of IGSF11 protein, such as an interacting protein that binds to an IgC2 domain of the IGSF11 protein, the method comprising the step of:
- administering to the subject a (eg, therapeutically effective amount of a) compound that is an inhibitor of the expression, function, activity and/or stability of an IgC2 domain of IGSF11 protein or a variant thereof;
- with the proviso that the compound is not one or more of:
- any ABP the subject of proviso (A) of claim 11;
 - any ABP the subject of proviso (B) of claim 11;
- to inhibit the interaction between IGSF11 protein and an interacting protein of IGSF11 protein.

74.—— The method of claim 73, wherein the compound is an ABP of any one of claims 11 to 45.—

75.—— The method of claim 73 or 74, wherein the interacting protein of IGSF11 protein is an endogenous binding partner of IGSF11 protein, and preferably is VSIR (VISTA) protein or a variant thereof.

76.—— ~~A method for identifying, generating and/or producing an ABP~~ that specifically binds to an IgC2 domain of IGSF11 or a variant thereof, the method comprising the use of such domain or an epitope of (or comprised in) such domain: (i) to screen a display library of a plurality of ABPs; or (ii) to immunise an animal.

77.—— The method of claim 76, wherein the use comprises the use of a protein that comprises at least one epitope of (or comprised in) the IgC2 domain of IGSF11 (or variant thereof), wherein the protein does not comprise an IgV domain of IGSF11 (or a variant or epitope thereof).

78.—— The method of claim 77, wherein the use comprises the use of a nucleic acid that encodes a protein comprising at least one epitope of (or comprised in) the IgC2 domain of IGSF11 (or variant thereof), wherein the nucleic acid does not encode a protein comprising an IgV domain of IGSF11 (or a variant or epitope thereof thereof).

79.—— The method of claim 78, comprising the step of immunising an animal (in particular a mammal, eg, a mouse, rat, rabbit, goat, camel, or llama) with a protein recited in claim 77 or with the nucleic acid recited in claim 78.—

80.—— The method of claim 76, comprising a step of administering to the animal an immunisation composition comprising a protein recited in claim 77 or a nucleic acid recited in claim 78, and optionally together with a pharmaceutically acceptable carrier and/or excipient.

81.—— The method of claim 76, further comprising the step of isolating from the animal: (i) sera that comprises an ABP that specifically binds to said domain of IGSF11 (or variant thereof); and/or (ii) B cells that express an ABP that specifically binds to said domain of IGSF11 (or variant thereof).

82.—— The method of claim 76, comprising the steps of screening a display library (eg, a phage display library) that displays a plurality of ABPs with a protein of claim 77, and identifying an ABP that specifically binds to the said domain of IGSF11 (or variant thereof).

83.—— The method of claim 81 or 82, further comprising the step of isolating (eg, purifying) the ABP that specifically binds to the said domain of IGSF11 (or variant thereof).

84.—— The method of any one of claims 76 to 83, for identifying, generating and/or producing an ABP for use in medicine.

85.—— The method of claim 834 further comprising the step of: determining or having determined, that the ABP has one or more of the functional characteristics as set forth in any one of claims 30 to 42 or claim 69; optionally, wherein an ABP determined to have one or more of such functional characteristics is for use in medicine.