

B-chain

Con-Ins G1 -1 TFDTKHRCGS γ ITNSYMDLCYR 21
hIns 1 FVNQHLCGSHLVEALYLVCGERGFFYTPKT 30

Figure 2 is a binding curve plot showing the relative binding (B/B_0 in %) on the y-axis (0 to 100) versus the logarithm of ligand concentration ($\log [\text{ligand}]$ in M) on the x-axis (-12 to -5). Three data series are plotted: sCon-Ins G1 (squares), PTM-free sCon-Ins G1 (triangles), and hIns (circles). sCon-Ins G1 and PTM-free sCon-Ins G1 show high binding affinity, with B/B_0 values around 90% at $\log [\text{ligand}] = -10.5$ and decreasing to around 20% at $\log [\text{ligand}] = -5.5$. hIns shows a lower binding affinity, with B/B_0 values around 90% at $\log [\text{ligand}] = -10.5$ and decreasing to around 10% at $\log [\text{ligand}] = -6.5$.

Figure 2 is a line graph showing the relative pAkt level (y-axis, 0.0 to 1.5) versus the log of insulin concentration (x-axis, -11 to -5 M). Four data series are plotted: hIns (open circles), sCon-Ins G1 (open squares), PTM-free sCon-Ins G1 (open triangles), and Con-Ins G1 (filled triangles). The hIns and sCon-Ins G1 curves are nearly identical, showing a sigmoidal increase in pAkt level with increasing insulin concentration, reaching a plateau around 1.0. The PTM-free sCon-Ins G1 curve shows a lower pAkt level, reaching a plateau around 0.8. The Con-Ins G1 curve shows the lowest pAkt level, reaching a plateau around 0.9.

Figure 3

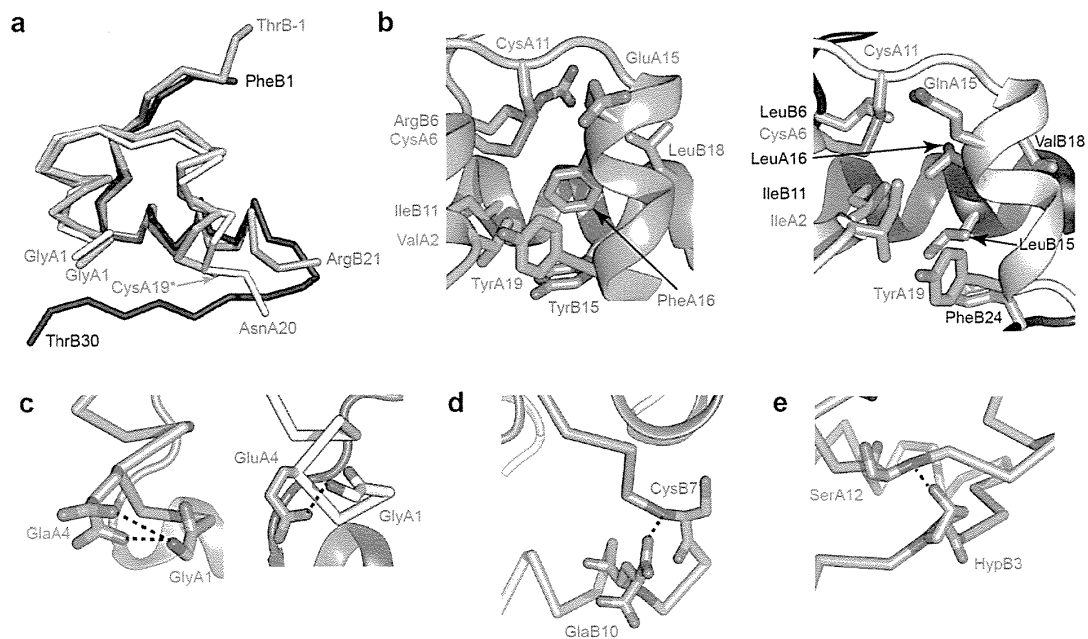


Figure 4

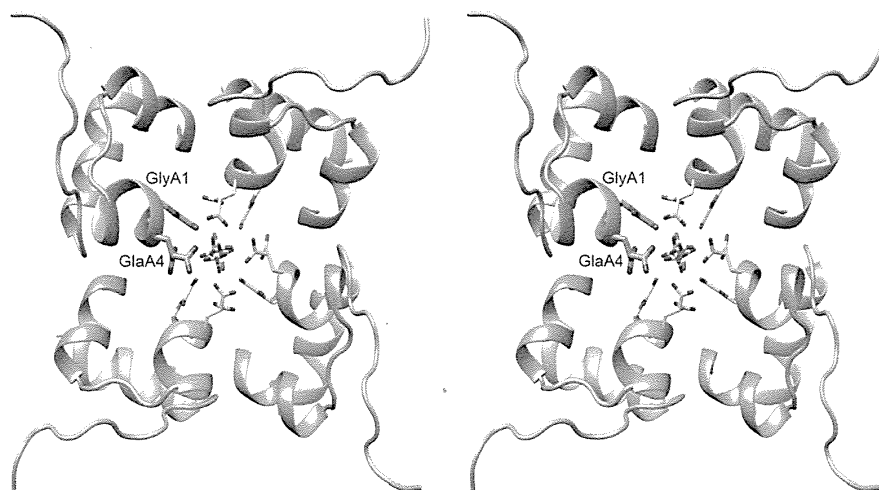


Figure 5

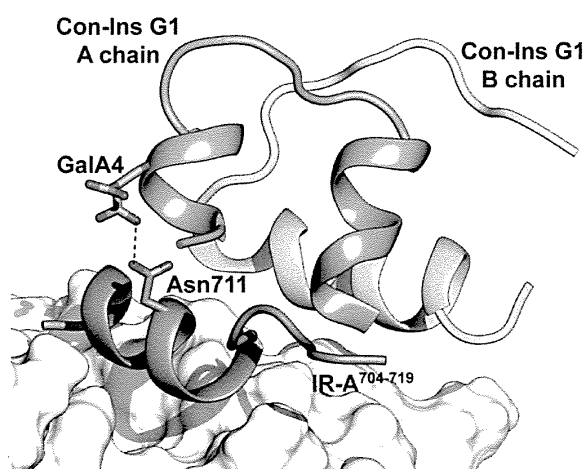


Figure 6

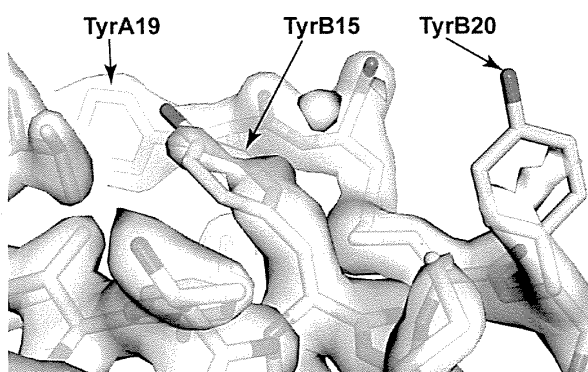


Figure 7

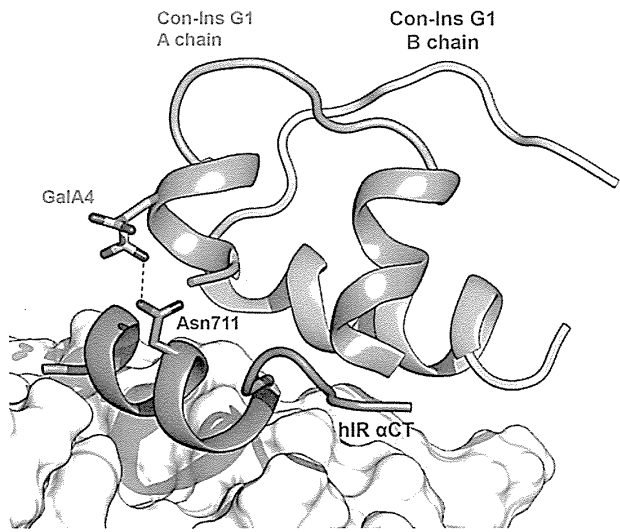


Figure 8

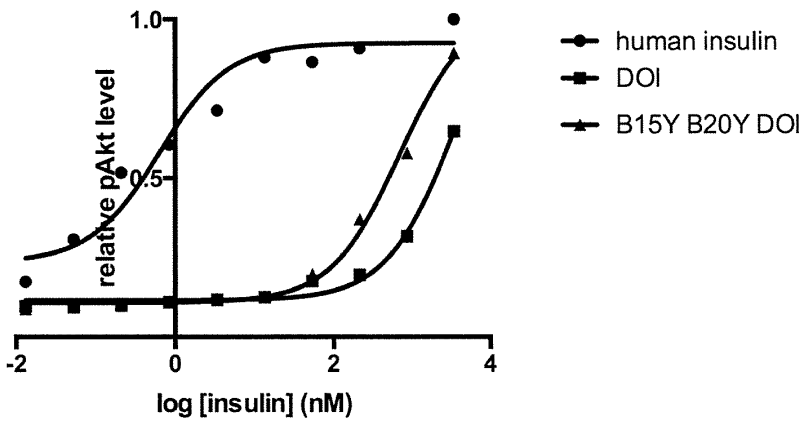


Figure 9

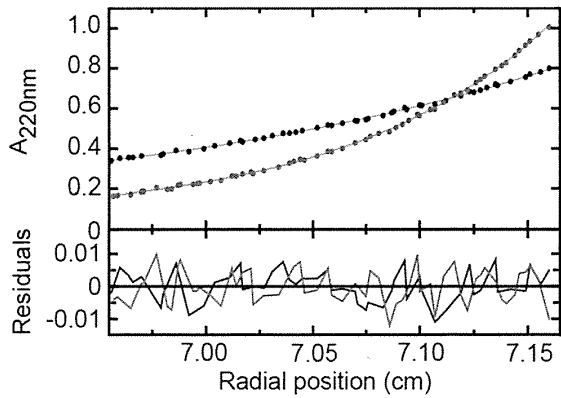


Figure 10

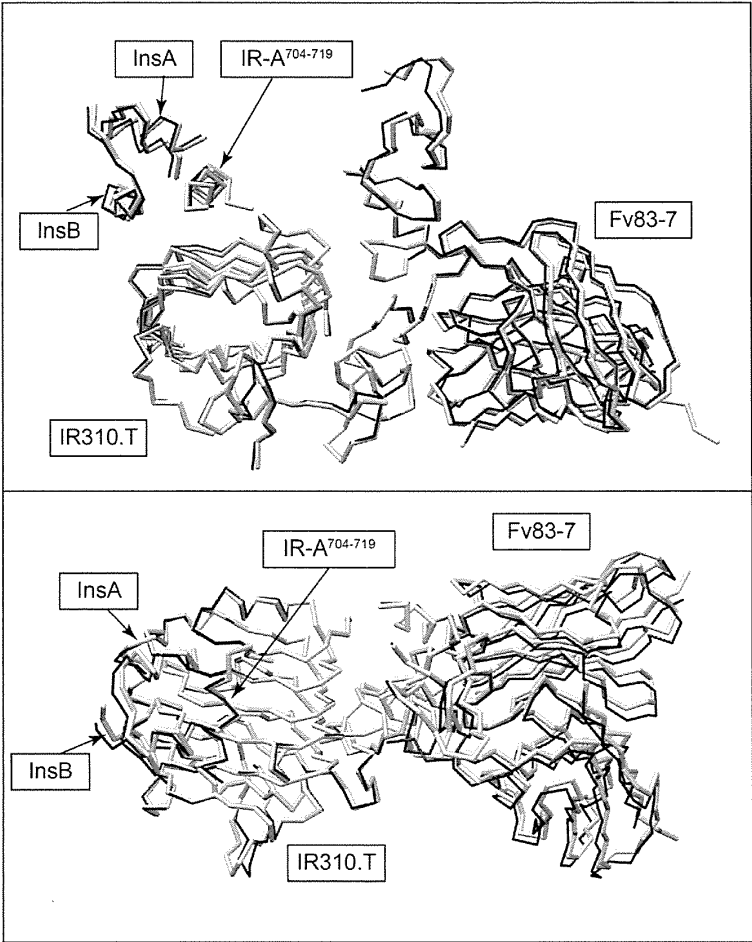


Figure 11

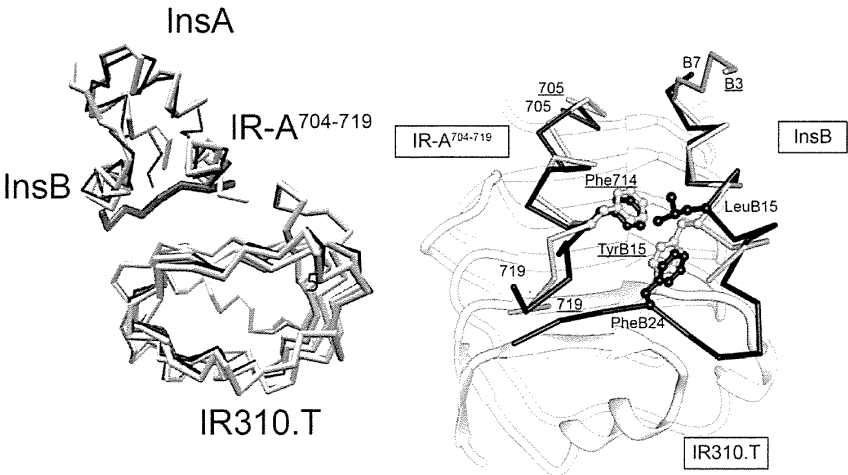
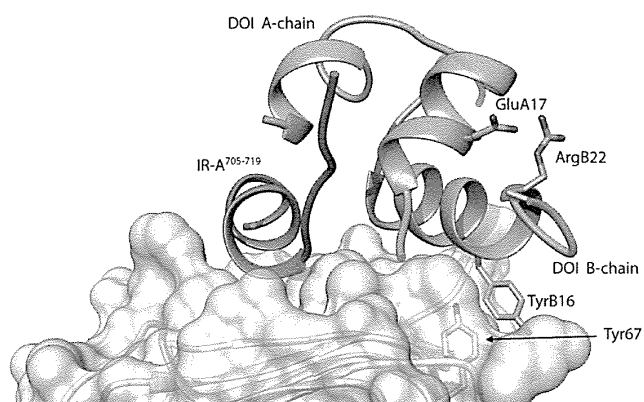
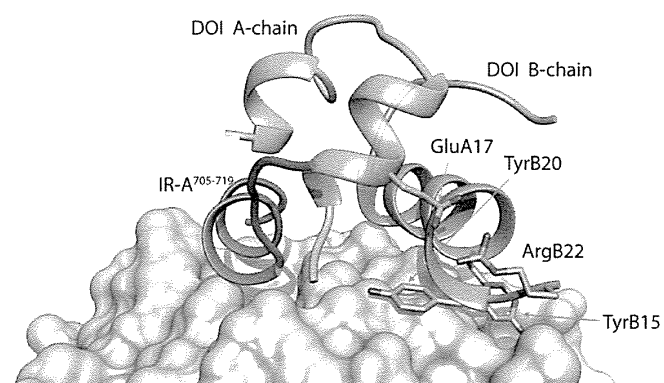
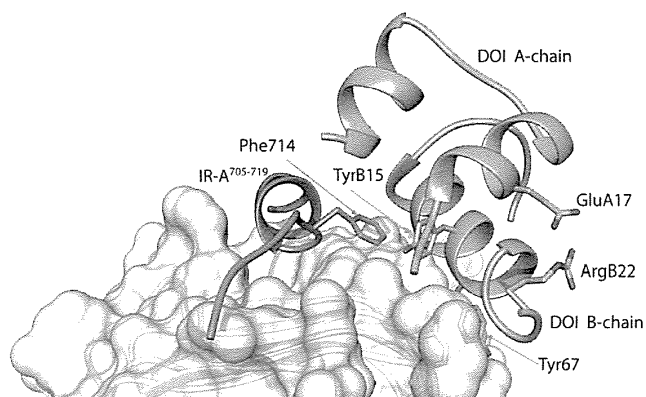


Figure 12

Figure 13

**Figure 14****Figure 15****Figure 16**

Positional Scan of Des-octa Insulin (DOI)
($\Delta\Delta G$ kcal/mol)

Positional Scan of Des-octa Insulin-TyrB15 (DOI-TyrB15)
(ΔΔG kcal/mol)

	Q1A1	Q1A2	Q1A3	Q1A4	Q1A5	Q1A6	Q1A7	Q1A8	Q1A9	Q1A10	Q1A11	Q1A12	Q1A13	Q1A14	Q1A15	Q1A16	Q1A17	Q1A18	Q1A19	Q1A20
G	0.4451936	-2.7732902	-2.5172338	-2.4971682	-0.4130908	-0.5548108	-0.5550183	-0.4406152	-2.5247490	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
A	0.4801780	-2.5201676	-2.1478336	-2.1478336	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-2.1478336	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
A	0.4359788	-2.3735151	-2.0161520	-2.0161520	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-2.0161520	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
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T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
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T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
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T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
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T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.3241100	-1.3241100	-0.2902758	-0.3828723	-0.4026023	-0.3717393	-1.3241100	-1.7252500	-0.0237724	-2.0321720	-0.4992160	-0.1128388	-0.7153930	-2.4865538	-0.9482626	-0.4743686	-0.4743686	-0.4743686
T	0.3470225	-2.0000000	-1.324110																	

Figure 18

Positional Scan of Des-acta Insulin-TyrB20 (DOI-TyrB20)
(ΔAG kcal/mol)

CUA	BEA1	BEA2	BEA3	BEA4	BEA5	BEA6	BEA7	BEA8	BEA9	BEA10	BEA11	BEA12	BEA13	BEA14	BEA15	BEA16	BEA17	BEA18	BEA19	BEA20	BEA21	BEA22	BEA23	BEA24	BEA25	BEA26	BEA27	BEA28	BEA29	BEA30	BEA31	BEA32	BEA33	BEA34	BEA35	BEA36	BEA37	BEA38	BEA39	BEA40	BEA41	BEA42	BEA43	BEA44	BEA45	BEA46	BEA47	BEA48	BEA49	BEA50	BEA51	BEA52	BEA53	BEA54	BEA55	BEA56	BEA57	BEA58	BEA59	BEA60	BEA61	BEA62	BEA63	BEA64	BEA65	BEA66	BEA67	BEA68	BEA69	BEA70	BEA71	BEA72	BEA73	BEA74	BEA75	BEA76	BEA77	BEA78	BEA79	BEA80	BEA81	BEA82	BEA83	BEA84	BEA85	BEA86	BEA87	BEA88	BEA89	BEA90	BEA91	BEA92	BEA93	BEA94	BEA95	BEA96	BEA97	BEA98	BEA99	BEA100	BEA101	BEA102	BEA103	BEA104	BEA105	BEA106	BEA107	BEA108	BEA109	BEA110	BEA111	BEA112	BEA113	BEA114	BEA115	BEA116	BEA117	BEA118	BEA119	BEA120	BEA121	BEA122	BEA123	BEA124	BEA125	BEA126	BEA127	BEA128	BEA129	BEA130	BEA131	BEA132	BEA133	BEA134	BEA135	BEA136	BEA137	BEA138	BEA139	BEA140	BEA141	BEA142	BEA143	BEA144	BEA145	BEA146	BEA147	BEA148	BEA149	BEA150	BEA151	BEA152	BEA153	BEA154	BEA155	BEA156	BEA157	BEA158	BEA159	BEA160	BEA161	BEA162	BEA163	BEA164	BEA165	BEA166	BEA167	BEA168	BEA169	BEA170	BEA171	BEA172	BEA173	BEA174	BEA175	BEA176	BEA177	BEA178	BEA179	BEA180	BEA181	BEA182	BEA183	BEA184	BEA185	BEA186	BEA187	BEA188	BEA189	BEA190	BEA191	BEA192	BEA193	BEA194	BEA195	BEA196	BEA197	BEA198	BEA199	BEA200	BEA201	BEA202	BEA203	BEA204	BEA205	BEA206	BEA207	BEA208	BEA209	BEA210	BEA211	BEA212	BEA213	BEA214	BEA215	BEA216	BEA217	BEA218	BEA219	BEA220	BEA221	BEA222	BEA223	BEA224	BEA225	BEA226	BEA227	BEA228	BEA229	BEA230	BEA231	BEA232	BEA233	BEA234	BEA235	BEA236	BEA237	BEA238	BEA239	BEA240	BEA241	BEA242	BEA243	BEA244	BEA245	BEA246	BEA247	BEA248	BEA249	BEA250	BEA251	BEA252	BEA253	BEA254	BEA255	BEA256	BEA257	BEA258	BEA259	BEA260	BEA261	BEA262	BEA263	BEA264	BEA265	BEA266	BEA267	BEA268	BEA269	BEA270	BEA271	BEA272	BEA273	BEA274	BEA275	BEA276	BEA277	BEA278	BEA279	BEA280	BEA281	BEA282	BEA283	BEA284	BEA285	BEA286	BEA287	BEA288	BEA289	BEA290	BEA291	BEA292	BEA293	BEA294	BEA295	BEA296	BEA297	BEA298	BEA299	BEA300	BEA301	BEA302	BEA303	BEA304	BEA305	BEA306	BEA307	BEA308	BEA309	BEA310	BEA311	BEA312	BEA313	BEA314	BEA315	BEA316	BEA317	BEA318	BEA319	BEA320	BEA321	BEA322	BEA323	BEA324	BEA325	BEA326	BEA327	BEA328	BEA329	BEA330	BEA331	BEA332	BEA333	BEA334	BEA335	BEA336	BEA337	BEA338	BEA339	BEA340	BEA341	BEA342	BEA343	BEA344	BEA345	BEA346	BEA347	BEA348	BEA349	BEA350	BEA351	BEA352	BEA353	BEA354	BEA355	BEA356	BEA357	BEA358	BEA359	BEA360	BEA361	BEA362	BEA363	BEA364	BEA365	BEA366	BEA367	BEA368	BEA369	BEA370	BEA371	BEA372	BEA373	BEA374	BEA375	BEA376	BEA377	BEA378	BEA379	BEA380	BEA381	BEA382	BEA383	BEA384	BEA385	BEA386	BEA387	BEA388	BEA389	BEA390	BEA391	BEA392	BEA393	BEA394	BEA395	BEA396	BEA397	BEA398	BEA399	BEA400	BEA401	BEA402	BEA403	BEA404	BEA405	BEA406	BEA407	BEA408	BEA409	BEA410	BEA411	BEA412	BEA413	BEA414	BEA415	BEA416	BEA417	BEA418	BEA419	BEA420	BEA421	BEA422	BEA423	BEA424	BEA425	BEA426	BEA427	BEA428	BEA429	BEA430	BEA431	BEA432	BEA433	BEA434	BEA435	BEA436	BEA437	BEA438	BEA439	BEA440	BEA441	BEA442	BEA443	BEA444	BEA445	BEA446	BEA447	BEA448	BEA449	BEA450	BEA451	BEA452	BEA453	BEA454	BEA455	BEA456	BEA457	BEA458	BEA459	BEA460	BEA461	BEA462	BEA463	BEA464	BEA465	BEA466	BEA467	BEA468	BEA469	BEA470	BEA471	BEA472	BEA473	BEA474	BEA475	BEA476	BEA477	BEA478	BEA479	BEA480	BEA481	BEA482	BEA483	BEA484	BEA485	BEA486	BEA487	BEA488	BEA489	BEA490	BEA491	BEA492	BEA493	BEA494	BEA495	BEA496	BEA497	BEA498	BEA499	BEA500	BEA501	BEA502	BEA503	BEA504	BEA505	BEA506	BEA507	BEA508	BEA509	BEA510	BEA511	BEA512	BEA513	BEA514	BEA515	BEA516	BEA517	BEA518	BEA519	BEA520	BEA521	BEA522	BEA523	BEA524	BEA525	BEA526	BEA527	BEA528	BEA529	BEA530	BEA531	BEA532	BEA533	BEA534	BEA535	BEA536	BEA537	BEA538	BEA539	BEA540	BEA541	BEA542	BEA543	BEA544	BEA545	BEA546	BEA547	BEA548	BEA549	BEA550	BEA551	BEA552	BEA553	BEA554	BEA555	BEA556	BEA557	BEA558	BEA559	BEA560	BEA561	BEA562	BEA563	BEA564	BEA565	BEA566	BEA567	BEA568	BEA569	BEA570	BEA571	BEA572	BEA573	BEA574	BEA575	BEA576	BEA577	BEA578	BEA579	BEA580	BEA581	BEA582	BEA583	BEA584	BEA585	BEA586	BEA587	BEA588	BEA589	BEA590	BEA591	BEA592	BEA593	BEA594	BEA595	BEA596	BEA597	BEA598	BEA599	BEA600	BEA601	BEA602	BEA603	BEA604	BEA605	BEA606	BEA607	BEA608	BEA609	BEA610	BEA611	BEA612	BEA613	BEA614	BEA615	BEA616	BEA617	BEA618	BEA619	BEA620	BEA621	BEA622	BEA623	BEA624	BEA625	BEA626	BEA627	BEA628	BEA629	BEA630	BEA631	BEA632	BEA633	BEA634	BEA635	BEA636	BEA637	BEA638	BEA639	BEA640	BEA641	BEA642	BEA643	BEA644	BEA645	BEA646	BEA647	BEA648	BEA649	BEA650	BEA651	BEA652	BEA653	BEA654	BEA655	BEA656	BEA657	BEA658	BEA659	BEA660	BEA661	BEA662	BEA663	BEA664	BEA665	BEA666	BEA667	BEA668	BEA669	BEA670	BEA671	BEA672	BEA673	BEA674	BEA675	BEA676	BEA677	BEA678	BEA679	BEA680	BEA681	BEA682	BEA683	BEA684	BEA685	BEA686	BEA687	BEA688	BEA689	BEA690	BEA691	BEA692	BEA693	BEA694	BEA695	BEA696	BEA697	BEA698	BEA699	BEA700	BEA701	BEA702	BEA703	BEA704	BEA705	BEA706	BEA707	BEA708	BEA709	BEA710	BEA711	BEA712	BEA713	BEA714	BEA715	BEA716	BEA717	BEA718	BEA719	BEA720	BEA721	BEA722	BEA723	BEA724	BEA725	BEA726	BEA727	BEA728	BEA729	BEA730	BEA731	BEA732	BEA733	BEA734	BEA735	BEA736	BEA737	BEA738	BEA739	BEA740	BEA741	BEA742	BEA743	BEA744	BEA745	BEA746	BEA747	BEA748	BEA749	BEA750	BEA751	BEA752	BEA753	BEA754	BEA755	BEA756	BEA757	BEA758	BEA759	BEA760	BEA761	BEA762	BEA763	BEA764	BEA765	BEA766	BEA767	BEA768	BEA769	BEA770	BEA771	BEA772	BEA773	BEA774	BEA775	BEA776	BEA777	BEA778	BEA779	BEA780	BEA781	BEA782	BEA783	BEA784	BEA785	BEA786	BEA787	BEA788	BEA789	BEA790	BEA791	BEA792	BEA793	BEA794	BEA795	BEA796	BEA797	BEA798	BEA799	BEA800	BEA801	BEA802	BEA803	BEA804	BEA805	BEA806	BEA807	BEA808	BEA809	BEA810	BEA811	BEA812	BEA813	BEA814	BEA815	BEA816	BEA817	BEA818	BEA819	BEA820	BEA821	BEA822	BEA823	BEA824	BEA825	BEA826	BEA827	BEA828	BEA829	BEA830	BEA831	BEA832	BEA833	BEA834	BEA835	BEA836	BEA837	BEA838	BEA839	BEA840	BEA841	BEA842	BEA843	BEA844	BEA845	BEA846	BEA847	BEA848	BEA849	BEA850	BEA851	BEA852	BEA853	BEA854	BEA855	BEA856	BEA857	BEA858	BEA859	BEA860	BEA861	BEA862	BEA863	BEA864	BEA865	BEA866	BEA867	BEA868	BEA869	BEA870	BEA871	BEA872	BEA873	BEA874	BEA875	BEA876	BEA877	BEA878	BEA879	BEA880	BEA881	BEA882	BEA883	BEA884	BEA885	BEA886	BEA887	BEA888	BEA889	BEA890	BEA891	BEA892	BEA893	BEA894	BEA895	BEA896	BEA897	BEA898	BEA899	BEA900	BEA901	BEA902	BEA903	BEA904	BEA905	BEA906	BEA907	BEA908	BEA909	BEA910	BEA911	BEA912	BEA913	BEA914	BEA915	BEA916	BEA917	BEA918	BEA919	BEA920	BEA921	BEA922	BEA923	BEA924	BEA925	BEA926	BEA927	BEA928	BEA929	BEA930	BEA931	BEA932	BEA933	BEA934	BEA935	BEA936	BEA937	BEA938	BEA939	BEA940	BEA941	BEA942	BEA943	BEA944	BEA945	BEA946	BEA947	BEA948	BEA949	BEA950	BEA951	BEA952	BEA953	BEA954	BEA955	BEA956	BEA957	BEA958	BEA959	BEA960	BEA961	BEA962	BEA963	BEA964	BEA965	BEA966	BEA967	BEA968	BEA969	BEA970	BEA971	BEA972	BEA973	BEA974	BEA975	BEA976	BEA977	BEA978	BEA979	BEA980	BEA981	BEA982	BEA983	BEA984	BEA985	BEA986	BEA987	BEA988	BEA989	BEA990	BEA991	BEA992	BEA993	BEA994	BEA995	BEA996	BEA997	BEA998	BEA999	BEA1000	BEA1001	BEA1002	BEA1003	BEA1004	BEA1005	BEA1006	BEA1007	BEA1008	BEA1009	BEA1010	BEA1011	BEA1012	BEA1013	BEA1014	BEA1015	BEA1016	BEA1017	BEA1018	BEA1019	BEA1020	BEA1021	BEA1022	BEA1023	BEA1024	BEA1025	BEA1026	BEA1027	BEA1028	BEA1029	BEA1030	BEA1031	BEA1032	BEA1033	BEA1034	BEA1035	BEA1036	BEA1037	BEA1038	BEA1039	BEA1040	BEA1041	BEA1042	BEA1043	BEA1044	BEA1045	BEA1046	BEA1047	BEA1048	BEA1049	BEA1050	BEA1051	BEA1052	BEA1053	BEA1054	BEA1055	BEA1056	BEA1057	BEA1058	BEA1059	BEA1060	BEA1061	BEA1062	BEA1063	BEA1064	BEA1065	BEA1066	BEA1067	BEA1068	BEA1069	BEA1070	BEA1071	BEA1072	BEA1073	BEA1074	BEA1075	BEA1076	BEA1077	BEA1078	BEA1079	BEA1080	BEA1081	BEA1082	BEA1083	BEA1084	BEA1085	BEA1086	BEA1087	BEA1088	BEA1089	BEA1090	BEA1091	BEA1092	BEA1093	BEA1094	BEA1095	BEA1096	BEA1097	BEA1098	BEA1099	BEA1100	BEA1101	BEA1102	BEA1103	BEA1104	BEA1105	BEA1106	BEA1107	BEA1108	BEA1109	BEA1110	BEA1111	BEA1112	BEA1113	BEA1114	BEA1115	BEA1116	BEA1117	BEA1118	BEA1119	BEA1120	BEA1121	BEA1122	BEA1123	BEA1124	BEA1125	BEA1126	BEA1127	BEA1128	BEA1129	BEA1130	BEA1131	BEA1132	BEA1133	BEA1134	BEA1135	BEA1136	BEA1137	BEA1138	BEA1139	BEA1140	BEA1141	BEA1142	BEA1143	BEA1144	BEA1145	BEA1146	BEA1147	BEA1148	BEA1149	BEA1150	BEA1151	BEA1152	BEA1153	BEA1154	BEA1155	BEA1156	BEA1157	BEA1158	BEA1159	BEA1160	BEA1161	BEA1162	BEA1163	BEA1164	BEA1165	BEA1166	BEA1167	BEA1168	BEA1169	BEA1170	BEA1171	BEA1172	BEA1173	BEA1174	BEA1175	BEA1176	BEA1177	BEA1178	BEA1179	BEA1180	BEA1181	BEA1182	BEA1183	BEA1184	BEA1185	BEA1186	BEA1187	BEA1188	BEA1189	BEA1190	BEA1191	BEA1192	BEA1193	BEA1194	BEA1195	BEA1196	BEA1197	BEA1198	BEA1199	BEA1200	BEA1201	BEA1202	BEA1203	BEA120
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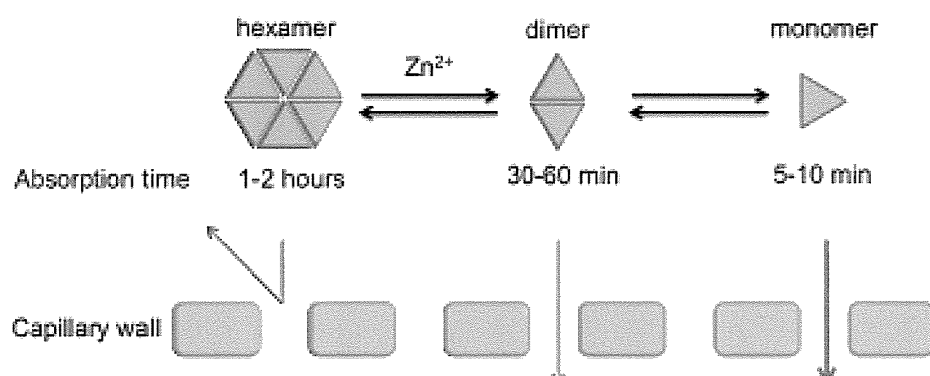


Figure 20

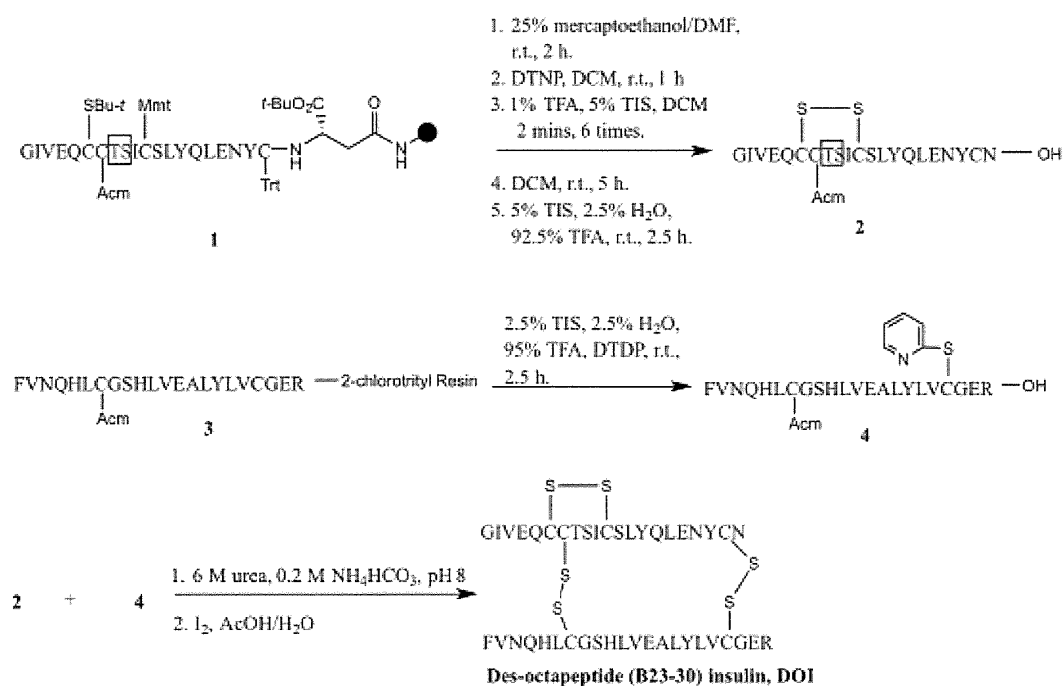


Figure 21

Insulin Signaling Activation

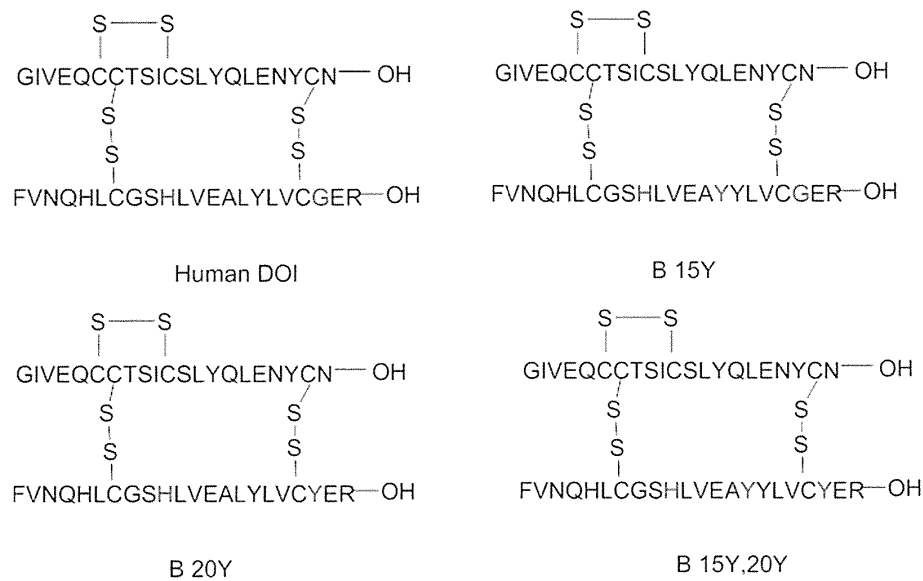
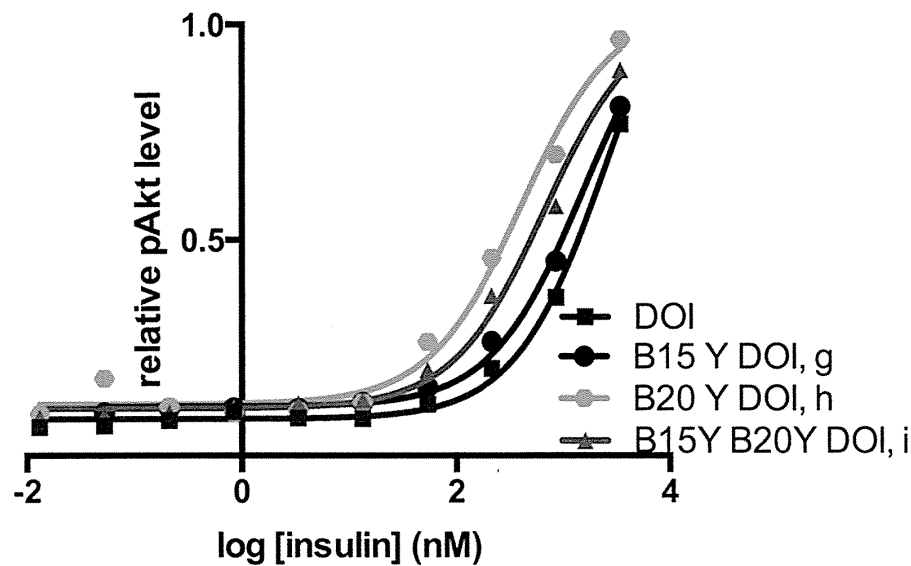


Figure 22

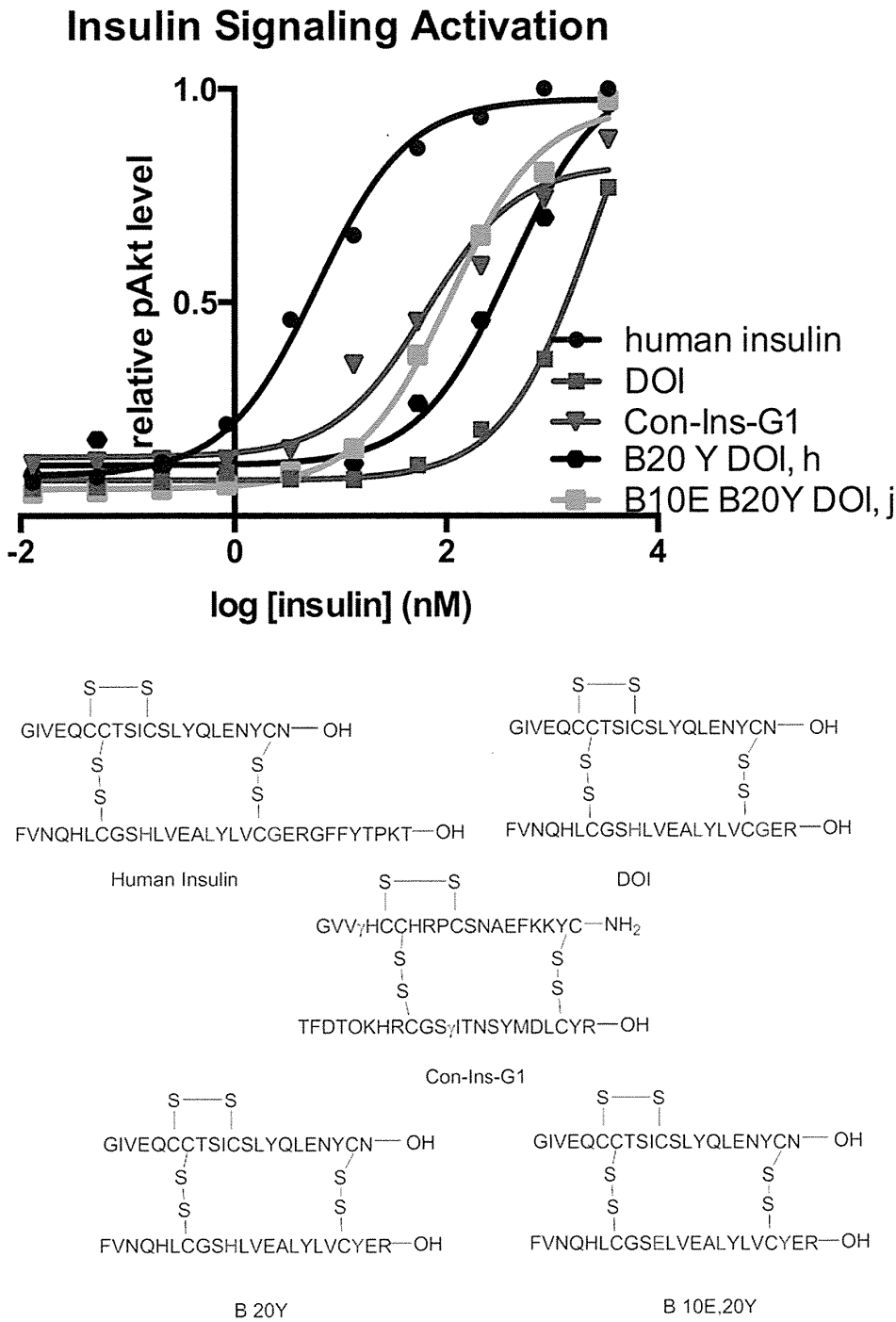


Figure 23

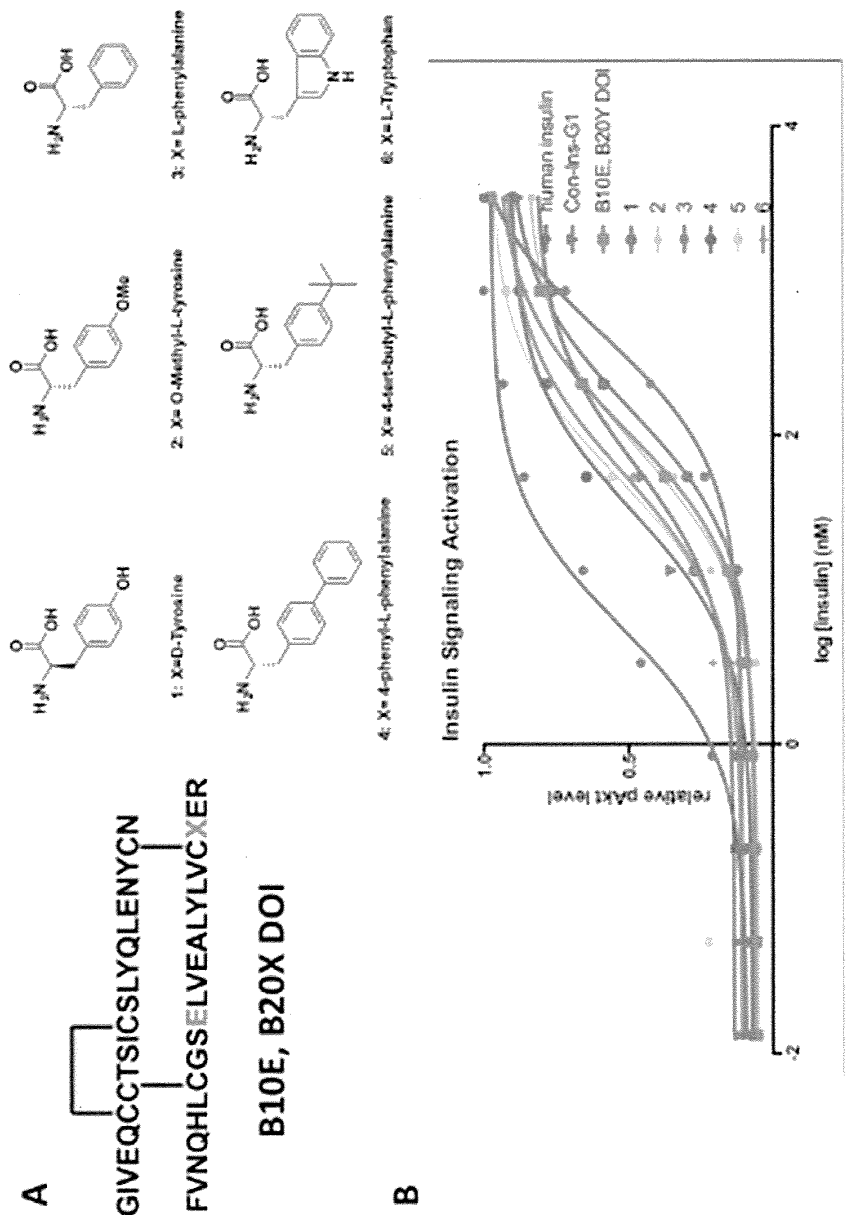


Figure 24

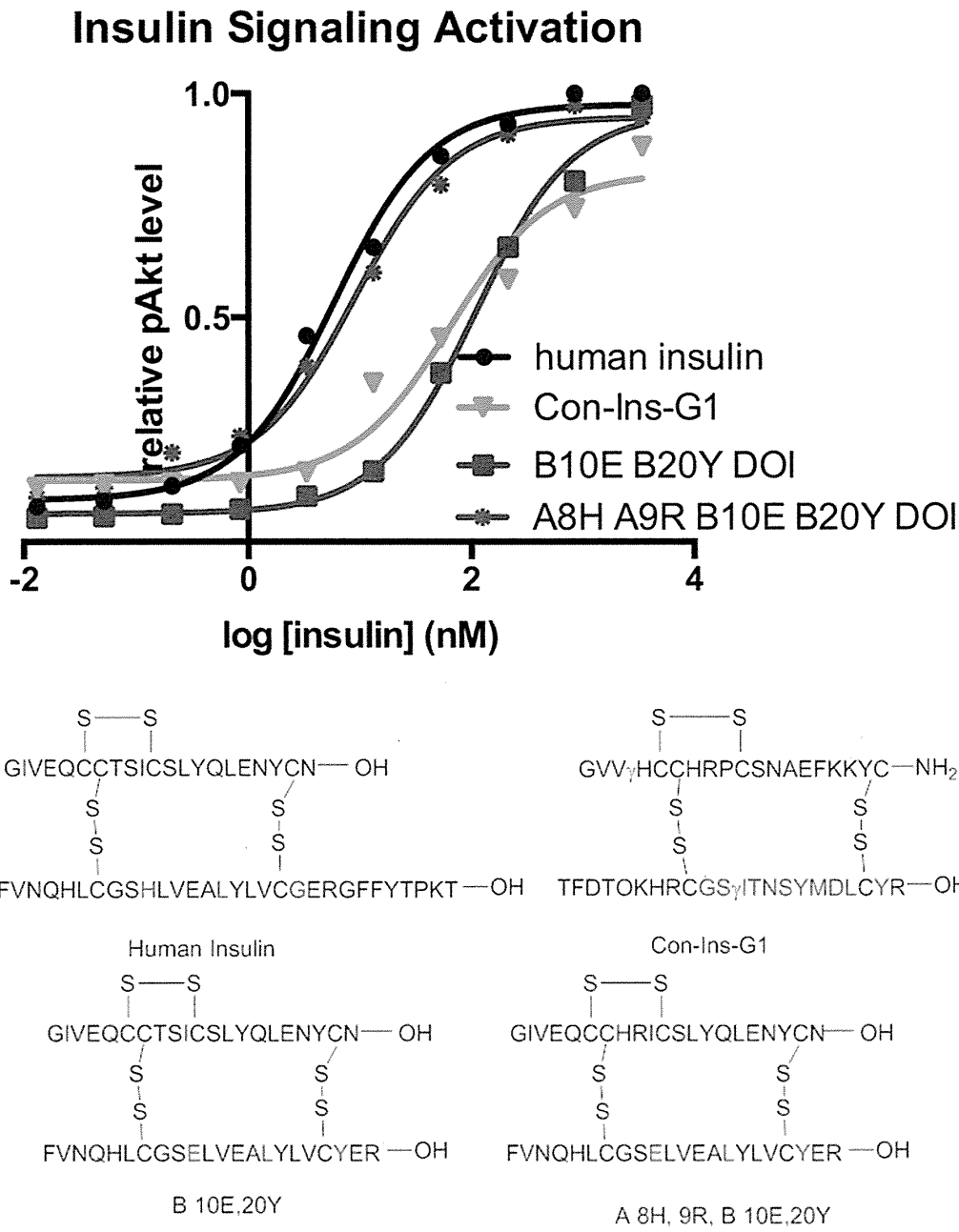


Figure 25

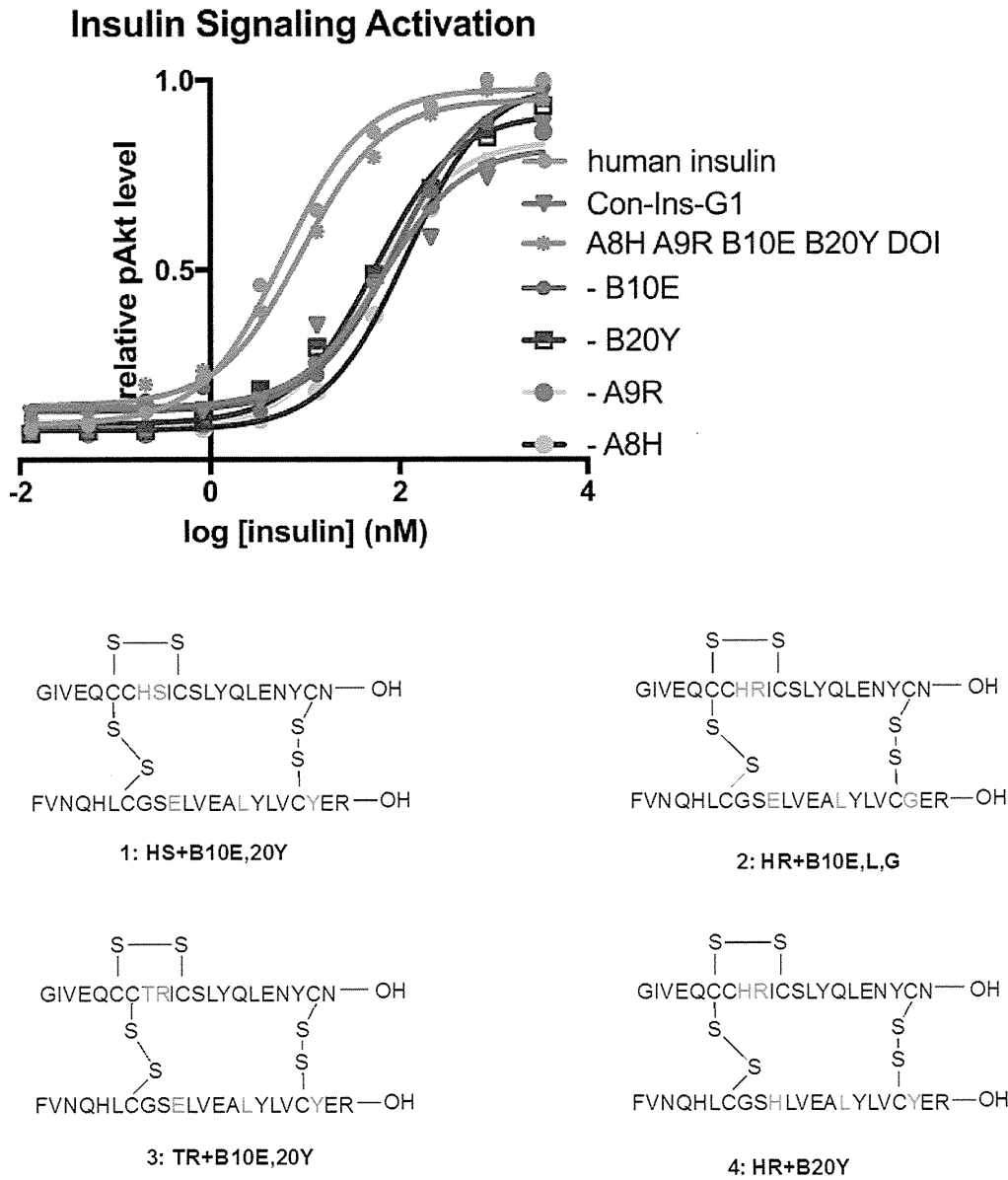


Figure 26

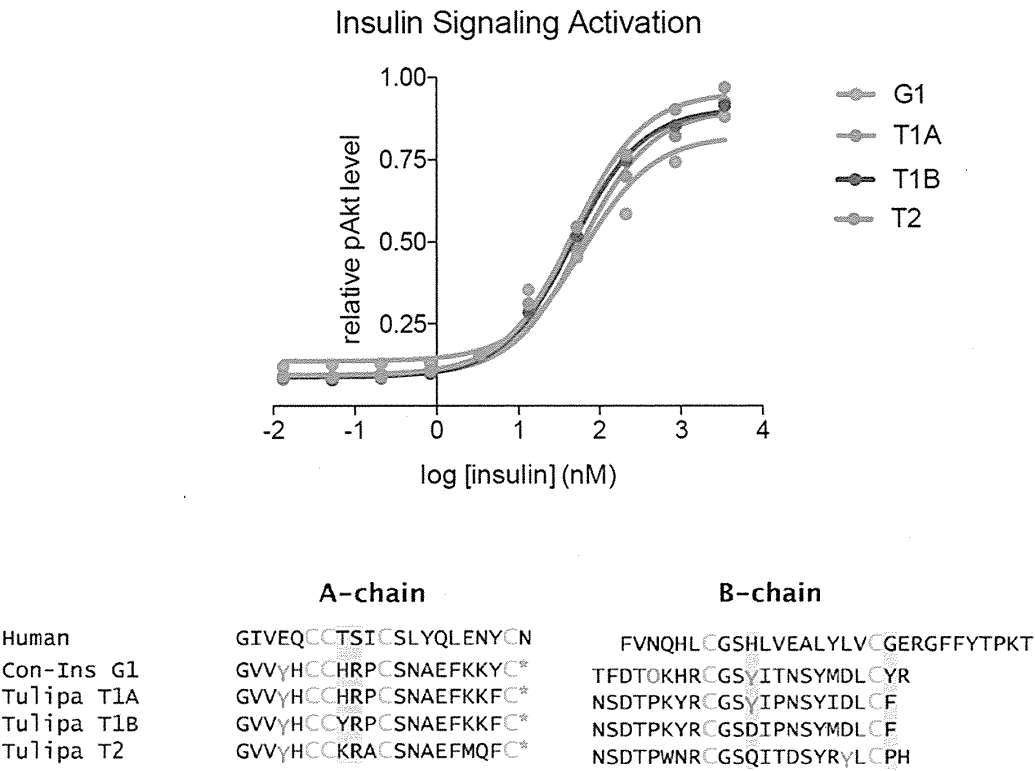


Figure 27