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HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE,
KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU,
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(54) Title: CAPSID VARIANTS AND METHODS OF USING THE SAME

AAV5 MSFVDRPEWLEZ -VGBGLRFLGLPAGPEK?KPNQOQDQAGLVL?GYNYLGFNGLD 39
AAV2 MAADGYLEWLEZ?L?SGITROMKLLXEGAPP?KPAERKQD?SGLVL?GYKYLGFNGLD 60
AAV9 MAADGYLEWLEZ?L?SGITROMKLLXEGAPP?KPAERKQD?SGLVL?GYKYLGFNGLD 60
AAV8 MAADGYLEWLEZ?L?SGITROMKLLXEGAPP?KPAERKQD?SGLVL?GYKYLGFNGLD 60
AAVrh74 MAADGYLEWLEZ?L?SGITROMKLLXEGAPP?KPAERKQD?SGLVL?GYKYLGFNGLD 60
AAV5 XGEPVNRADAEVAREHDSYNTQLAGDN?YLYNHA?A?PQRLKEDTS?GGLGRAV?Q 119
AAV2 XGEPVNRADAEVAREHDSYNTQLAGDN?YLYNHA?A?PQRLKEDTS?GGLGRAV?Q 120
AAV9 XGEPVNRADAEVAREHDSYNTQLAGDN?YLYNHA?A?PQRLKEDTS?GGLGRAV?Q 120
AAV8 XGEPVNRADAEVAREHDSYNTQLAGDN?YLYNHA?A?PQRLKEDTS?GGLGRAV?Q 120
AAVrh74 XGEPVNRADAEVAREHDSYNTQLAGDN?YLYNHA?A?PQRLKEDTS?GGLGRAV?Q 120
AAV5 AKKRVLP?PLGLV?EPVKTAPGKKR?PVEHS?PQ -EPDSSSGTGKAGQ?PAKKRLNFGQ?GDA 168
AAV2 AKKRVLP?PLGLV?EPVKTAPGKKR?PVEHS?PQ -EPDSSSGTGKAGQ?PAKKRLNFGQ?GDA 179
AAV9 AKKRVLP?PLGLV?EPVKTAPGKKR?PVEHS?PQ -EPDSSSGTGKAGQ?PAKKRLNFGQ?GDA 179
AAV8 AKKRVLP?PLGLV?EPVKTAPGKKR?PVEHS?PQ -EPDSSSGTGKAGQ?PAKKRLNFGQ?GDA 180
AAVrh74 AKKRVLP?PLGLV?EPVKTAPGKKR?PVEHS?PQ -EPDSSSGTGKAGQ?PAKKRLNFGQ?GDA 180
AAV5 ZAGPSGSGQLQIPAPASSLGDTHSAGGG?L?GNNQDAGVGNASG?WHCDSTHMD? 228
AAV2 DS-VDPQ?PLGPP?AAPSGSLG?THSAGGG?L?GNNQDAGVGNASG?WHCDSTHMD? 238
AAV9 ES-VDPQ?PLGPP?AAPSGSLG?THSAGGG?L?GNNQDAGVGNASG?WHCDSTHMD? 238
AAV8 ES-VDPQ?PLGPP?AAPSGSLG?THSAGGG?L?GNNQDAGVGNASG?WHCDSTHMD? 239
AAVrh74 ES-VDPQ?PLGPP?AAPSGSLG?THSAGGG?L?GNNQDAGVGNASG?WHCDSTHMD? 239
AAV5 VTKSTR?WALPT?NNHLYKQIS -QSCASNDH?Y?GYST?WGY?F?N?H?S?P?K? 287
AAV2 VTKSTR?WALPT?NNHLYKQIS -QSCASNDH?Y?GYST?WGY?F?N?H?S?P?K? 296
AAV9 VTKSTR?WALPT?NNHLYKQIS -QSCASNDH?Y?GYST?WGY?F?N?H?S?P?K? 298
AAV8 VTKSTR?WALPT?NNHLYKQIS -QSCASNDH?Y?GYST?WGY?F?N?H?S?P?K? 299
AAVrh74 VTKSTR?WALPT?NNHLYKQIS -QSCASNDH?Y?GYST?WGY?F?N?H?S?P?K? 299
AAV5 QRLNNWVG?P?RSLRV?L?F?H?I?N?K?E?V?T?Q?D?S?T?T?I?A?N?L?T?S?V?Q?E?T?D?D?Y?L?P?V?W?G? 347
AAV2 QRLNNWVG?P?RSLRV?L?F?H?I?N?K?E?V?T?Q?D?S?T?T?I?A?N?L?T?S?V?Q?E?T?D?D?Y?L?P?V?W?G? 356
AAV9 QRLNNWVG?P?RSLRV?L?F?H?I?N?K?E?V?T?Q?D?S?T?T?I?A?N?L?T?S?V?Q?E?T?D?D?Y?L?P?V?W?G? 358
AAV8 QRLNNWVG?P?RSLRV?L?F?H?I?N?K?E?V?T?Q?D?S?T?T?I?A?N?L?T?S?V?Q?E?T?D?D?Y?L?P?V?W?G? 359
AAVrh74 QRLNNWVG?P?RSLRV?L?F?H?I?N?K?E?V?T?Q?D?S?T?T?I?A?N?L?T?S?V?Q?E?T?D?D?Y?L?P?V?W?G? 359

FIG. 1A

(57) Abstract: The disclosure is directed in part to variant capsid polypeptides that can be used to deliver payloads.

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