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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT,

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(54) Title: CHIMERIC ANTIGEN RECEPTORS TARGETING FC RECEPTOR-LIKE 5 AND USES THEREOF

(57) Abstract: The presently disclosed subject matter provides for methods and compositions for treating a neoplasia (*e.g.*, multiple myeloma). It relates to chimeric antigen receptors (CARs) that specifically target Fc Receptor-like 5 (FcRL5), *e.g.*, domain 9 of FcRL5, and immunoresponsive cells comprising such CARs. The presently disclosed FcRL5-targeted CARs have enhanced immune-activating properties, including anti-tumor activity.

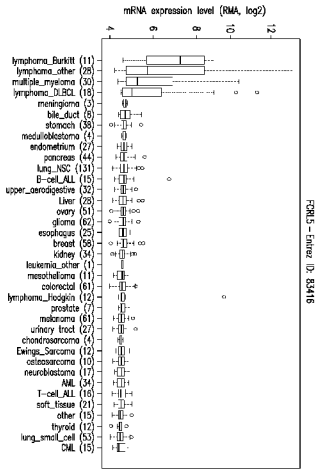


FIG. 1

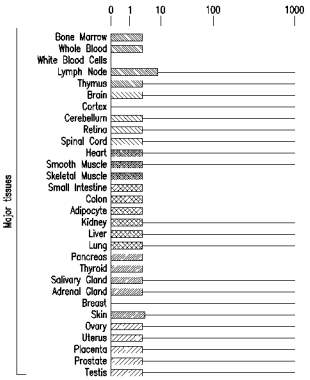


FIG. 1 (continued)

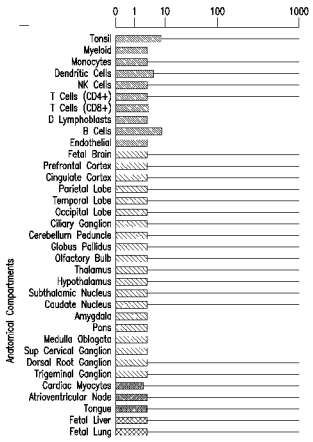


FIG. 1 (continued)

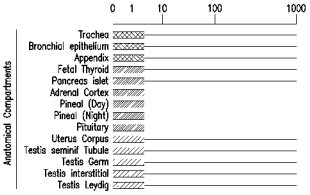


FIG. 1 (continued)

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