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Human CD304(Neuropilin 1)-muIg Fusion Protein*

CATALOG#: 557-020

QUANTITY: 25 µg

CONCENTRATION: 0.5 mg/ml

Molecular Structure: A soluble molecule consisting of the extracellular domain of mature human CD304 fused to murine IgG2a Fc.

Residual signal peptide amino acids (6aa): **kpqape**

Mature CD304(EC) (623aa):

(22)frndkcgdtikiespgyltspgyphsyhpsekcewliqapdpyqriminfphfledrdckdyvvefdgenenghfrgkfcgkiappvsvsgpffikfvsdyethgagfsiryefikrgzpcsqnyttpsgvikspgfpkykpslectyiv
fypkmseliefesfdlepdsnppegmfcrydrleiwdfpdyvphigrycgkktprirssgilsmvfytdsaiakegfsanysvlqsvsdffkcmalgesgeihsdqitassqystnwsaersrlnypengwtgdsyrewiqvdlglrfvt
avtqgaisketkkkyvkykidvssngedwitkegnkpvlfqgnntpdvvaavfplkpltrfvrikpatwetgismrfeyvgckitdypcsgmlgmvsqisdsqitssnqgdrnwmpenirvtvrsrgwalppaphsyinewlqidlgeeki
vrgiigggkhrnkfvfmrkfkigvsnngsdwkmimddskrkaksfegnnydtpelrtfpalstrfiriyperathggglrmellgceveaptagptpnlgvdecddqanchsgtdfdqfqtggtvlatekptvidstiqsefp(644)

Murine IgG2aFc (233aa):

eprgntikpcppckcpapnllggsvfifppkikdvimislspivtvcvvdvseddvdvqiswfvnnevhtaqtqthredynstrvvsalpiqhqdwmvsgkefkckvnmkdlpapiertiskpksvrapqvvyvlpppeemtkkqvltcm
vtdfmpedyvewtmgktnyktepvlidsqsyfmyskrveknwvemsyscvshghlnhhtkksfrtpgk

Predicted nonglycosylated monomeric weight: 97 kd.

Transfectant Cell Line: HEK

INFORMATION: Human CD304 (neuropilin, NRP, NP1, BDCA-4) is a 140 kD type I glycoprotein expressed by a variety of tissue types, including Treg, follicular TH, neurons, Dendritic cells, and Endothelial cells. Its ligands include VEGF165 and Semaphorin family members. It is a reliable marker for human BCP-ALL¹. Soluble CD304 has been used to slow progression of murine AML². Recombinant CD304-muIg binds to immobilized VEGF165 in EIA. CD304-muIg runs as a dimer in SDS-PAGE with a molecular weight of approximately 200 kD.

References: 1) Pratyusha Gudapati Prashant R Tembhare, et al. (2020 Jul) *Cytometry B Clin Cytom.* **98(4):**328-335.

doi: 10.1002/cyto.b.21866. Epub 2020 Jan 16. 2) Gagnon ML, Klagsbrun M, et al. (March 2000). "Proceedings of the National Academy of Sciences of the United States of America." **97 (6):** 2573-8. Bibcode:2000PNAS...97.2573G. doi:10.1073/pnas.040337597. PMC 15970. PMID 10688880.

STORAGE CONDITIONS: Store at 2 - 5°C. Freeze/Thawing is not recommended.

PRODUCT STABILITY: Product should retain activity for at least 6 months after shipping date when stored as recommended. Ship Date: _____

BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 0.5mg/ml Gentamicin Sulfate (as a preservative).

PRODUCTION: Human CD304-muIg fusion protein was purified from (low FBS containing) tissue culture supernatant of HEK transfectants using Protein A and size exclusion chromatography. Product was 0.2µ sterile filtered and vialled under aseptic conditions.

PERFORMANCE: Human CD304-muIg was reactive in EIA utilizing immobilized VEGF165 and detection with GAM/HRP. EC50 was ~3.5 ng/ml in this format.

*Research use only. Not for use in Diagnostic procedures.

