

TECHNICAL DATA SHEET

## Recombinant Human 4-1BB Receptor (Carrier-Free)

Catalog Number: 21-9182

### RPx-Pro™ Recombinant Protein

#### PRODUCT INFORMATION

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Recombinant Human 4-1BB Receptor (Carrier-Free)

#### DESCRIPTION

Recombinant Human soluble 4-1BB Receptor is a member of the TNF superfamily of receptors, is mainly expressed on the surface of a variety of T cells, but also found in B cells, monocytes, and various transformed cell lines. 4-1BB Receptor binds to 4-1BBL to provide a co-stimulatory signal for T lymphocytes. Signaling by 4-1BB Receptor has been implicated in the antigen-presentation process and generation of cytotoxic T cells. The human 4-1BB Receptor gene codes for a 255 amino acid type I transmembrane protein containing a 17 amino acid N-terminal signal sequence, a 169 amino acid extracellular domain, a 27 amino acid transmembrane domain and a 42 amino acid cytoplasmic domain.

#### MOLECULAR MASS

Recombinant Human soluble 4-1BB Receptor is a 167 amino acid polypeptide (17.7 kDa), which contains the cysteine-rich TNFR-like extracellular domain of 4-1BB Receptor.

#### AMINO ACID SEQUENCE

MERTRLQDP CSNCPAGTFC DNNRNQICSP CPPNSFSSAG GQRTCDICRQ CKGVFRTRKE CSSTSNAECD CTPGFHCLGA GCSMCEQDCK  
 QQQLTKKGC KNCCFGTFND QKRGICRPWT NCSLDGKSVL VNGTKERDVV CGPSPADLSP GASSVTPPAP AREPGHS

#### SOURCE

E. coli

#### APPLICATIONS

Bioassay

#### PURITY

98 %

#### STORAGE

-20°C

#### PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE gel.

#### ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1EU/μg).

#### AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

#### CROSS REACTIVITY

N/A

#### BIOACTIVITY

Determined by its inhibitory effect of the 4-1BBL mediated stimulation of IL-8 production by human PBMC. About 90% of inhibition was seen using a concentration of 1 μg for both 4-1BBL and 4-1BBR.

#### RESEARCH AREAS

Proliferation, Receptors, TNF Superfamily, Apoptosis

#### RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

#### REFERENCES

Van Blarcom T, Lindquist K, Melton Z, Cheung WL, Wagstrom C, McDonough D, Oseguera CV, Ding S, Rossi A, Potluri S, Sundar P, Pitts S, Sirota M, Casas MG, Yan Y, Jones J, Roe-Zurz Z, Srinivasan SS, Zhai W, Pons J, Rajpal A, Chaparro-Riggers J. *MAbs*. 2017 Dec 11:0. doi: 10.1080/19420862.2017.1406570. Lee SY, Olsen P, Lee DH, Kenoyer AL, Budde LE, O'Steen S, Green DJ, Heimfeld S, Jensen MC, Riddell SR, Press OW, Till BG. *J Immunother*. 2017 Nov 23. doi: 10.1097/CJI.000000000000199.

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