Active Recombinant Human TREM2 Protein, Fc/His-tagged

Cat. No. TREM2-01H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Human TREM2, amino acid His19 - Ser174 (Accession # Q9NZC2), with a C-terminal hIgG1 Fc and 6His tag was expressed in 293E cells.
Species	Human
Source	HEK293
ProteinLength	19-174 a.a.
Description	This gene encodes a membrane protein that forms a receptor signaling complex with the TYRO protein tyrosine kinase binding protein. The encoded protein functions in immune response and may be involved in chronic inflammation by triggering the production of constitutive inflammatory cytokines. Defects in this gene are a cause of polycystic lipomembranous osteodysplasia with sclerosing leukoencephalopathy (PLOSL). Alternative splicing results in multiple transcript variants encoding different isoforms.
Form	Disulfide-linked homodimer
Bio-activity	When Human TREM2-Fc Chimera is coated at 2.0 μg/mL (100 μl/well), human Apolipoprotein E3 binds with an EC50 of 8 - 32 ng/mL. Purified anti-Apo E 109-116 antibody and HRP goat anti-mouse IgG (minimal x-reactivity) antibody was used to detect the binding. Measured by its ability to bind hAPOE3 using a functional ELISA.
Molecular Mass	45.1 kDa

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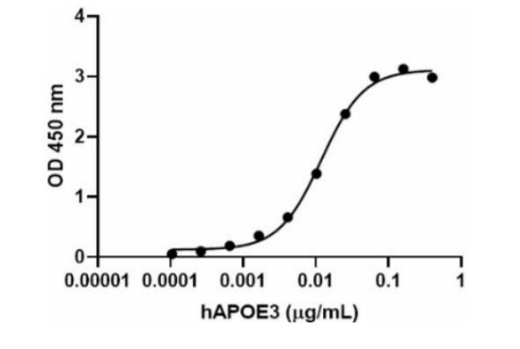
Endotoxin	Less than 0.01 ng/μg cytokine as determined by the LAL method.
Purity	>95%, as determined by Coomassie stained SDS-PAGE.
Applications	Bioassay
Storage	Unopened vial can be stored between 2 centigrade and 8 centigrade for up to 2 weeks, at -20 centigrade for up to six months, or at -70 centigrade or colder until the expiration date. For maximum results, quick spin vial prior to opening. The protein can be aliquoted and stored at -20 centigrade or colder. Stock solutions can also be prepared at 50 - 100 g/mL in appropriate sterile buffer, carrier protein such as 0.2 - 1% BSA or HSA can be added when preparing the stock solution. Aliquots can be stored between 2 centigrade and 8 centigrade for up to one week and stored at -20 centigrade or colder for up to 3 months. Avoid repeated freeze/thaw cycles.
Concentration	10 and 25 μg sizes are bottled at 200 μg/mL. 100 μg and larger sizes are lot-specific and bottled at the concentration indicated on the vial
Storage Buffer	0.22 μm filtered protein solution is in PBS, pH 7.2.

GENE INFORMATION

Gene Name	TREM2 triggering receptor expressed on myeloid cells 2 [Homo sapiens (human)]
Official Symbol	TREM2
Synonyms	TREM2; triggering receptor expressed on myeloid cells 2; PLOSL2; TREM-2; Trem2a; Trem2b; Trem2c; triggering receptor expressed on myeloid cells 2; triggering receptor expressed on monocytes 2; triggering receptor expressed on myeloid cells 2a

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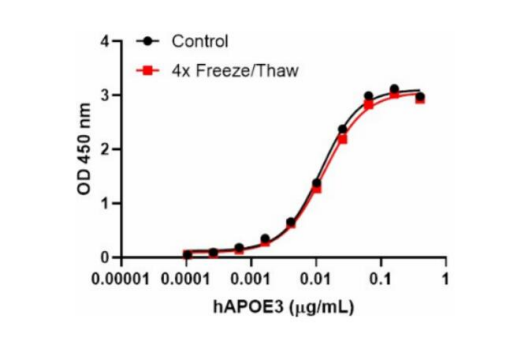
Gene ID	54209
mRNA Refseq	NM_018965
Protein Refseq	NP_061838
MIM	605086
UniProt ID	Q9NZC2



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Stability testing for human TREM2-Fc Chimera.



Recombinant human TREM2-Fc Chimera was aliquoted in PBS, pH 7.2 at 0.2 mg/mL. One aliquot was frozen and thawed four times (4x Freeze/Thaw), and compared to a control kept at 4 centigrade (control). The samples were tested in a binding assay with human Apolipoprotein E3.

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