

Recombinant Human C10orf54 protein, His-tagged

Cat. No. C10orf54-313H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human C10orf54(Phe33-Ala194) fused with an Asp187Glu substitution and a C-terminal 6-His tag was expressed in NS0.
Species	Human
Source	Mammalian Cells
ProteinLength	Phe33-Ala194
Description	Platelet receptor Gi24, also known as Dies1, VISTA, SISP1 and B7-H5, is a 55-65 kDa transmembrane glycoprotein with homology to B7-like immune costimulatory molecules. Mature human Gi24 contains a 162 amino acid (aa) extracellular domain (ECD) with one V-type Ig-like domain, a 21 aa transmembrane segment, and a 96 aa cytoplasmic domain. Within the ECD, human Gi24 shares 70% and 67% aa sequence identity with mouse and rat Gi24, respectively. The 30 kDa ECD can be shed by MT1-MMP, with a 25-30 kDa fragment remaining in the membrane. Gi24 promotes both MT1-MMP expression and the MT1-MMP mediated activation of MMP-2. Gi24 supports the differentiation of embryonic stem cells (ESC) and enhances BMP-4 induced signaling in ESC, but is also down-regulated following BMP-4 exposure. It binds to BMP-4 directly, and also associates with the type I BMP receptor Activin RIB/ALK-4 (4, 5). Gi24 is expressed on the surface of naïve CD4+ T cells, regulatory T cells, and adipocytes. It is up-regulated in vivo on activated monocytes and dendritic cells. Gi24 inhibits CD4+ and CD8+ T cell proliferation, and their production of IL-2 and IFN-gamma. Its expression on tumor cells attenuates the anti-tumor

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

immune response and enables more rapid tumor progression. In contrast, Gi24 limits disease progression in the autoimmune disease model EAE. Gi24 also acts as a co-inhibitory receptor on alloreactive T cells to regulate T cell tolerance.

Predicted N Terminal	Phe33
Form	Lyophilized from a 0.2 µm filtered solution in PBS.
Molecular Mass	Predicted Molecular Mass: 19 kDa; SDS-PAGE: 30-65 kDa, reducing conditions.
Endotoxin	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	Reconstitute at 200 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

GENE INFORMATION

Gene Name	C10orf54 chromosome 10 open reading frame 54 [Homo sapiens]
Official Symbol	C10orf54

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Synonyms	C10ORF54; chromosome 10 open reading frame 54; platelet receptor Gi24; B7 H5; GI24; SISP1; stress induced secreted protein 1; B7-H5; PP2135;
Gene ID	64115
mRNA Refseq	NM_022153
Protein Refseq	NP_071436
UniProt ID	Q9H7M9
Chromosome Location	10q22.1
Function	receptor activity;

 Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA