Active Recombinant Mouse 4632428N05Rik, Fc-tagged

Cat. No. C10orf54-26M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse 4632428N05Rik(Phe33 - Ala191), exists as a dimer under non-reducing condition, fused to Fc fusion from human IgG1 at C-terminus, was expressed in Human cells.
Species	Mouse
Source	Human Cells
ProteinLength	33-191 a.a.
Description	B7-H5 (B7 homolog 5), also known as platelet receptor Gi24, C10orf54, Dies1, VISTA, PD-1H and SISP1, is a single-pass type I transmembrane glycoprotein that belongs to the B7 family of the Ig superfamily. Unlike other B7 family members that usually contain one Ig V-like and one Ig C-like domain in the extracellular region, mature B7-H5 has only one Ig V- like domain. B7-H5 is expressed in bone, on embryonic stem cells (ESCs), and on tumor cell surfaces. On ESCs, it interacts with BMP-4 and potentiates BMP signaling and the transition from an undifferentiated to a differentiated state. On tumor cells, B7-H5 both promotes MT1-MMP expression and activity and serves as a substrate for MT1-MMP. This increases the potential for cell motility. B7-H5 can be shed by MT1MMP, generating a soluble 30 kDa extracellular fragment and a 25-30 kDa membrane-bound fragment. B7-H5 is expressed on the surface of naïve CD4+ T cells and regulatory T cells. Its expression is upregulated in vivo on activated monocytes and dendritic cells. It is reported that B7-H5 inhibits CD4+ and CD8+ T cell proliferation, and their production of IL2 and IFNγ. Its

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	expression on tumor cells attenuates the antitumor immune response and enables more rapid tumor progression. In contrast, it has also been reported that B7-H5 limits disease progression in the autoimmune disease model EAE.
Form	Supplied at 0.5 mg/ml in sterile PBS pH7.4 (carrier free).
Bio-activity	Inhibits antiCD3e antibody induced IL2 secretion and T cell proliferation.
Molecular Mass	Calculated molecular mass 43.3 kDa; estimated by SDS-PAGE under reducing condition 65-70 kDa probably due to glycosylation
AA Sequence	FKVATPYSLYVCPEGQNVTLTCRLLGPVDKGHDVTFYKTWYRSSRGEVQTCSERR PIRNLTFQDLHLHHGGHQAA NTSHDLAQRHGLESASDHHGNFSITMRNLTLLDSGL YCCLVVEIRHHHSEHRVHGAMELQVQTGKDAPSNCVVY PSSSQDSENITAASTGT HTCPPCPAPELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYV D GVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKT ISKAKGQPREPQVYTLPPS REEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNY KTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVM HEALHNHYTQKSLSLSPG K
Endotoxin	<0.1 EU per 1 μg of purified recombinant protein determined by the LAL method
Purity	>95% judged by SDS-PAGE under reducing condition
Stability	It is recommended to store small aliquots at the temperature below –20°C for long-term storage and the product is stable for 3 months. The undiluted protein can be stored at 4°C for no more than 2 weeks.
Storage	The product is shipped at 4°C. Upon receipt, centrifuge the product briefly before opening the vial. Use a manual defrost freezer and avoid repeated freeze-thaw

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	cycles.
Warning	FOR RESEARCH USE ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE IN HUMAN.

GENE INFORMATION

Gene Name	4632428N05Rik RIKEN cDNA 4632428N05 gene [Mus musculus]
Official Symbol	4632428N05Rik
Synonyms	Dies1; PD-1H; VISTA; platelet receptor Gi24; differentiation of ESCs 1
Gene ID	74048
mRNA Refseq	NM_001159572
Protein Refseq	NP_001153044
UniProt ID	Q9D659
Chromosome Location	10; 10 B4
Function	protein binding

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