Recombinant Human MB21D1 Protein (161-522 aa), His-SUMO-tagged

Cat. No. MB21D1-2114H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human MB21D1 Protein (161-522 aa) is produced by E. coli expression system. This protein is fused with a 6xHis-SUMO tag at the N-terminal. Protein Description: Partial.
Species	Human
Source	E.coli
ProteinLength	161-522 aa
Description	Nucleotidyltransferase that catalyzes the formation of cyclic GMP-AMP (cGAMP) from ATP and GTP. Catalysis involves both the formation of a 2',5' phosphodiester linkage at the GpA step and the formation of a 3',5' phosphodiester linkage at the ApG step, producing c[G(2',5')pA(3',5')p]. Has antiviral activity by acting as a key cytosolic DNA sensor, the presence of double-stranded DNA (dsDNA) in the cytoplasm being a danger signal that triggers the immune responses. Binds cytosolic DNA directly, leading to activation and synthesis of cGAMP, a second messenger that binds to and activates TMEM173/STING, thereby triggering type-I interferon production. cGAMP can be transferred between cells by virtue of packaging within viral particles contributing to IFN-induction in newly infected cells in a cGAS-independent but TMEM173/STING-dependent manner (PubMed:26229115).
Form	Tris-based buffer,50% glycerol

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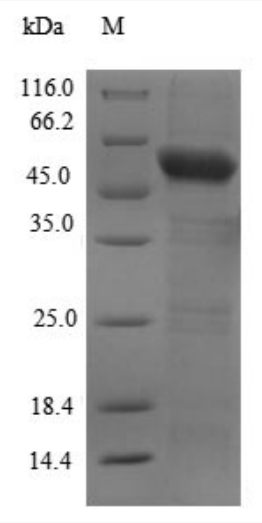
Molecular Mass	58.3 kDa
AA Sequence	GASKLRAVLEKLKLSRDDISTAAGMVKGVVDHLLLRLKCDSAFRGVGLLNTGSYYEH VKISAPNEFDVMFKLEVPRIQLEEYSNTRAYYFVKFKRNPKENPLSQFLEGEILSASK MLSKFRKIIKEEINDIKDTDVIMKRKRGGSPAVTLLISEKISVDITLALESKSSWPASTQ EGLRIQNWLSAKVRKQLRLKPFYLVPKHAKEGNGFQEETWRLSFSHIEKEILNNHGK SKTCCENKEEKCCRKDCLKLMKYLLEQLKERFKDKKHLDKFSSYHVKTAFFHVCTQ NPQDSQWDRKDLGLCFDNCVTYFLQCLRTEKLENYFIPEFNLFSSNLIDKRSKEFLT KQIEYERNNEFPVFDEF
Purity	> 90% as determined by SDS-PAGE.
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4 centigrade for up to one week.
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20 centigrade/-80 centigrade. The shelf life of lyophilized form is 12 months at -20 centigrade/-80 centigrade.
Concentration	A hardcopy of COA with reconstitution instruction is sent along with the products.

GENE INFORMATION

Gene Name	MB21D1 Mab-21 domain containing 1 [Homo sapiens]
Official Symbol	MB21D1
Synonyms	MB21D1; protein MB21D1; C6orf150; MGC131892; MGC142166; MGC142168;
Gene ID	115004

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mRNA Refseq	NM_138441
Protein Refseq	NP_612450
MIM	613973
UniProt ID	Q8N884



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

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