CREATIVE BIOMART®
Immune Checkpoints

Recombinant Mouse Cd81 Protein, C-Myc/DDK-tagged

Product Information

Cat	*IMP-6851*
Official Symbol	*CD81*
Product Overview	*Purified recombinant protein of Mouse CD81 antigen (Cd81), with C-terminal Myc/DDK tag, expressed in HEK293T cells.*
Description	*Structural component of specialized membrane microdomains known as tetraspanin-enriched microdomains (TERMs), which act as platforms for receptor clustering and signaling. Essential for trafficking and compartmentalization of CD19 receptor on the cell surface of activated B cells (PubMed: 23499492). Upon initial encounter with a microbial pathogen, enables the assembly of CD19-CR2 and B cell receptor complexes at signaling TERMs, lowering the threshold dose of antigen required to trigger B cell clonal expansion and humoral immune response (By similarity). In T cells, associates with CD4 or CD8 coreceptors and defines the maturation state of antigen-induced synapses with B cells (By similarity). Facilitates localization of CD3 in these immune synapses, required for costimulation and sustained activation of T cells, preferentially triggering T helper type 2 immune response (PubMed: 11046035). Can act both as positive and negative regulator of homotypic or heterotypic cell-cell fusion processes. In myoblasts, associates with another tetraspanin CD9 in complex with PTGFRN and inhibits myotube fusion during muscle regeneration (PubMed: 23575678). In macrophages, associates with CD9 and beta-1 and beta-2 integrins, and prevents macrophage fusion into multinucleated giant cells specialized in ingesting complement-opsonized large particles. Also prevents the fusion between mononuclear cell progenitors into osteoclasts in charge of bone resorption. Positively regulates sperm-egg fusion and may be involved in the acrosome reaction (PubMed: 16380109, PubMed: 17290409). Regulates protein trafficking in intracellular compartments. In T cells, associates with dNTPase SAMHD1 and defines its subcellular location, enabling its degradation by the proteasome and thereby controlling intracellular dNTP levels (By similarity). Also regulates integrin-dependent migration of macrophages, particularly relevant for inflammatory response in the lung (PubMed: 18662991).[UniProtKB/Swiss-Prot Function]*
Expression System	*HEK293T*
Species	*Mouse*
Tag	*C-Myc/DDK*
Form	*25mM Tris.HCl, pH 7.3, 100mM glycine, 10% glycerol*
Molecular Mass	*25.8 kDa*

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AA Sequence	*MGVEGCTKCIKYLLFVFNFVFWLAGGVILGVALWLRHDPQTTSLLYLELG NKPAPNTFYVGIYILIAVGAVMMFVGFLGCYGAIQESQCLLGTFFTCLVILF ACEVAAGIWGFVNKDQIAKDVKQFYDQALQQAVMDDDANNAKAVVKTFH ETLNCCGSNALTTLTTTILRNSLCPSGGNILTPLLQQDCHQKIDELFSGKLY LIGIAAIVVAVIMIFEMILSMVLCCGIRNSSVYTRTRPLEQKLISEEDLAANDI LDYKDDDDKV*
Purity	*> 80% as determined by SDS-PAGE and Coomassie blue staining.*
Storage	*Store at -80 centigrade after receiving vials. Stability: Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.*
Concentration	*> 50 μg/mL as determined by microplate BCA method.*

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