Recombinant Mouse SPN/CD43 Protein (Fc Tag)

Catalog No. PKSM040511

Note: Centrifuge before opening to ensure complete recovery of vial contents.

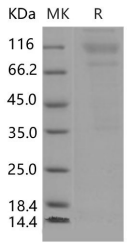
Description

Synonyms	A630014B01Rik;Cd43;Galgp;Ly-48;Ly48
Species	Mouse
Expression Host	HEK293 Cells
Sequence	Met 1-Gly 248
Accession	P15702
Calculated Molecular Weight	49.6 kDa
Observed molecular weight	110 kDa
Tag	C-hFc
Bioactivity	Not validated for activity

Properties

Purity	> 80 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per μg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80℃. Reconstituted protein solution can be stored at 4-8℃ for 2-7 days. Aliquots of reconstituted samples are stable at < -20℃ for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 80 % as determined by reducing SDS-PAGE.

Background

CD43 is an abundantly expressed molecule on the T-cell surface that shows distinct localization to the migrating T-cell uropod and the distal pole complex (DPC) opposite the immunological synapse via association with the ezrin-radixin-

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moesin (ERM) family of actin regulatory proteins. CD43 has a 235-amino acid (aa) extracellular domain, a 23-aa transmembrane domain, and a 123-aa cytoplasmic domain, all encoded by a single exon. The intracytoplasmic region of the protein is necessary to transduce signals; it is rich in potentially phosphorylable threonines and serines but lacks tyrosine residues as well as catalytic activity. CD43 engagement on human peripheral blood T cells and monocytes leads to cell activation and proliferation through the generation of second messengers such as diacylglycerol and inositol phosphates, protein kinase C (PKC) activation and Ca2+ mobilization. In addition, CD43 ligation on human T cells induces the association of CD43 with Src family kinases, presumably through the interaction of their Src homology 3 domain with a proline-rich region of the CD43 intracytoplasmic tail. This molecule has been implicated in T cell activation, enhancing T cell response to allogeneic or mitogenic stimulation and CD43-specific signals have been reported to be sufficient to activate T cells in the absence of T cell receptor (TCR) engagement. In summary, CD43 regulates multiple T-cell functions, including T-cell activation, proliferation, apoptosis, and migration.

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