

Product Data:**Product SKU:** RPES1784**Size:** 20µg**Species:** Mouse**Expression host:** HEK293 Cells**Uniprot:** P15702**Protein Information:****Molecular Mass:** 49.6 kDa**AP Molecular Mass:** 110 kDa**Tag:** C-Fc**Bio-activity:****Purity:** > 80 % as determined by SDS-PAGE**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C 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**Reconstitution:** Please refer to the printed manual for detailed information.**Application:****Synonyms:** A630014B01Rik;Cd43;Galgp;Ly-48;Ly48

Immunogen Information:

Sequence: Met 1-Gly 248

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-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 phosphorylatable 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.