Human CellExp™ CD172a/ SIRP alpha Extracellular Domain (ED), Human Recombinant

CATALOG NO:

7506-10	10 µg
7506-50	50 µg
7506-250	250 µg
7506-1000	1 mg

ALTERNATE NAMES: SHPS1, SIRPA, CD172A, BIT, MFR, MYD1, P84, PTPNS1, MyD-1 antigen

SOURCE: HEK 293 cells (Extracellular Domain 31-373)

PURITY: > 95% by SDS-PAGE

MOL. WEIGHT: This protein is fused with polyhistidine tag at the C-terminus and has a calculated MW of ~39 kDa (31–373 aa). Under both reducing and non-reducing conditions the protein migrates as 45-50 kDa in SDS-PAGE due to glycosylation.

FORM: Lyophilized

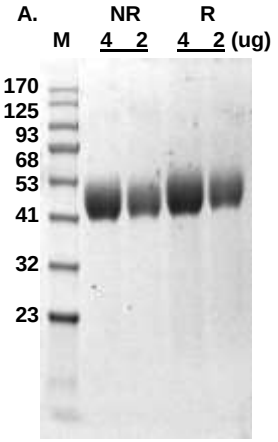
FORMULATION: Lyophilized from 0.22 µm filtered solution in PBS pH 7.4

STORAGE CONDITIONS: Store at -20°C. After reconstitution, aliquot and store at -80°C. Avoid repeated freezing and thawing cycles.

RECONSTITUTION: Centrifuge the vial prior to opening. Reconstitute in distilled water to a concentration up to 2 mg/ml.

DESCRIPTION: Signal Regulatory Protein Alpha (SIRPα) or Tyrosine-protein phosphatase non-receptor type substrate 1 (SHPS-1) is a member of the signal-regulatory-protein (SIRP) family, and also belongs to the immunoglobulin superfamily. SIRP family members are receptor-type transmembrane glycoproteins known to be involved in the negative regulation of receptor tyrosine kinase-coupled signaling processes. This protein can be phosphorylated by tyrosine kinases. This protein supports adhesion of cerebellar neurons, neurite outgrowth and glial cell attachment and is found to participate in signal transduction mediated by various growth factor receptors. CD47 has been demonstrated to be a ligand for this receptor protein, which leads to the negative regulation of phagocytosis, mast cell activation and dendritic cell activation. Diseases associated with SIRPA include bladder neck obstruction and autoimmune hemolytic anemia.

BIOLOGICAL ACTIVITY: Immobilized Human CD47 at 5 µg/ml (100 µl/well) can bind SIRPα-biotin with a linear range of 0.05-2.5 µg/ml.



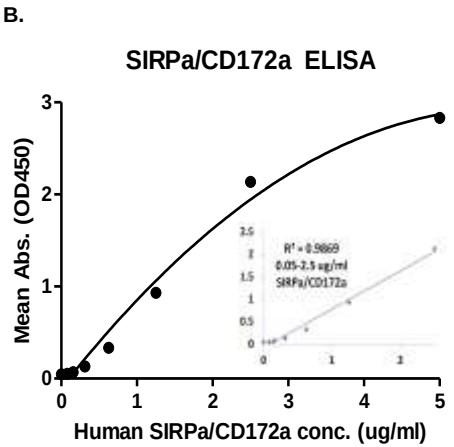


Fig A. SDS-PAGE (4-20%) of Recombinant SIRPα/CD172a (ED): Recombinant protein loaded under reducing (R) and non-reducing (NR) conditions. The protein shows a MW of 45-50 kDa. Lane M-MW marker, Lanes 2-3 SIRPA (Non-reducing), Lanes 4-5 SIRPA (Reducing) condition

Fig B. Biological activity: Immobilized Human CD47 at 5 µg/ml (100 µl/well) can bind to biotinylated SIRPα/CD172a (ED) with a linear range of 0.05-2.5 µg/ml

RELATED PRODUCT:

- Human CellExp™ CD223, human recombinant **(Cat. No. 7278-10, -50)**
- Human CellExp™ CD71, human recombinant **(Cat. No. 7279-10, -50)**
- Human CellExp™ CD273, human recombinant **(Cat. No. 7369-10, -50)**
- Human CellExp™ CD33, human recombinant **(Cat. No. 7370-10, -50)**
- Human CellExp™ CD36, human recombinant **(Cat. No. 7371-10, -50)**
- Human CellExp™ CD87, human recombinant **(Cat. No. 7372-20, -100)**
- Human CellExp™ CD360, human recombinant **(Cat. No. 7373-20, -100)**
- Human CellExp™ CD244, human recombinant **(Cat. No. 7374-10, -50)**

FOR RESEARCH USE ONLY! Not to be used on humans.