

**HUMAN CADM1 PROTEIN, HIS TAG****Cat.#:** 11864**Product Name:** Human CADM1 Protein**Size:** 10 µg, 50 µg and 100 µg**Synonyms:** BL2;IGSF4;IGSF4A;Necl-2;NECL2;RA175;sgIGSF;ST17;stSLC-1;SYNCAM;synCAM1;TSLC1**Target:** CADM1**UNIPROT ID:** Q9BY67**Description:** Recombinant Human CADM1 Protein with C-terminal 6xHis tag

**Background:** Mediates homophilic cell-cell adhesion in a  $\text{Ca}^{2+}$ -independent manner. Also mediates heterophilic cell-cell adhesion with CADM3 and NECTIN3 in a  $\text{Ca}^{2+}$ -independent manner. Acts as a tumor suppressor in non-small-cell lung cancer (NSCLC) cells. Interaction with CRTAM promotes natural killer (NK) cell cytotoxicity and interferon-gamma (IFN-gamma) secretion by CD8 cells in vitro as well as NK cell-mediated rejection of tumors expressing CADM3 in vivo. May contribute to the less invasive phenotypes of lepidic growth tumor cells. In mast cells, may mediate attachment to and promote communication with nerves. CADM1, together with MITF, is essential for development and survival of mast cells in vivo. Acts as a synaptic cell adhesion molecule and plays a role in the formation of dendritic spines and in synapse assembly (By similarity). May be involved in neuronal migration, axon growth, pathfinding, and fasciculation on the axons of differentiating neurons. May play diverse roles in the spermatogenesis including in the adhesion of spermatocytes and spermatids to Sertoli cells and for their normal differentiation into mature spermatozoa.[UniProtKB/Swiss-Prot Function]

**Species/Host:** HEK293

**Molecular Weight:** The protein has a predicted molecular mass of 37.9 kDa after removal of the signal peptide. The apparent molecular mass of CADM1-His is approximately 55-70 kDa due to glycosylation.

**Molecular Characterization:** CADM1(Gln45-His374) 6xHis tag

**Purity:** The purity of the protein is greater than 85% as determined by SDS-PAGE and Coomassie blue staining.

**Formulation & Reconstitution:** Lyophilized from nanodisc solubilization buffer (20 mM Tris-HCl, 150 mM NaCl, pH 8.0). Normally 5% – 8% trehalose is added as protectants before lyophilization.

**Storage & Shipping:** Store at  $-20^{\circ}\text{C}$  to  $-80^{\circ}\text{C}$  for 12 months in lyophilized form. After reconstitution, if not intended for use within a month, aliquot and store at  $-80^{\circ}\text{C}$  (Avoid repeated freezing and thawing). Lyophilized proteins are shipped at ambient temperature.

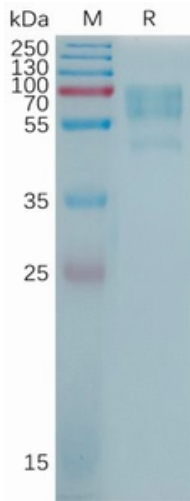


Figure 1. Human CADM1 Protein, His Tag on SDS-PAGE under reducing condition.