



# Recombinant Protein Technical Manual

**Recombinant Mouse OBCAM/OPCML Protein (aa 5-313, His Tag)(Active)**  
RPES2961

## Product Data:

**Product SKU:** RPES2961

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_808574.2

## Protein Information:

**Molecular Mass:** 32.7 kDa

**AP Molecular Mass:** 44-55 kDa

**Tag:** C-His

**Bio-activity:** 1. Measured by its binding ability in a functional ELISA. 2. Immobilized mouse OPCmL-His at 10µg/mL (100µL/well) can bind human LSAMP-Fc . The EC50 of human LSAMP-Fc is 0.04-0.1 µg/mL.

**Purity:** > 95 % 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:** Functional ELISA

**Synonyms:** 2900075O15Rik;3732419F12;AI844366;B930023M13Rik;C230027C17;Gm181;Obcam; B-CAM;Gplu;Lu

## Immunogen Information:

**Sequence:** Ala5-Val313

## Background:

Opioid-binding Cell Adhesion Molecule (OBCAM), also known as OPCML, is a GPI-anchored cell adhesion molecule in the plasma membrane. This neuron-specific protein, consists of three immunoglobulin (Ig)-like domains anchored to the membrane through a glycosylphosphatidylinositol (GPI)-tail. OPCML also belongs to the member of the IgLON family, a subgroup of the immunoglobulin superfamily, consisting of three members, LAMP, OBCAM, and Neurotrimin. These molecules interact homophilically and heterophilically within the family, and OBCAM acts only as heterodimers with LAMP or Neurotrimin and possibly inhibits neurite outgrowth from cerebellar granule cells. OBCAM has been presumed to play a role as a cell adhesion/recognition molecule. Furthermore, the OPCML protein defects may play an important role in the carcinogenesis of cervical or ovarian cancers, and this gene is regarded as a candidate TSG (tumor suppressor gene).