

# Recombinant Protein Technical Manual Recombinant Human Oncomodulin/OCM Protein (His Tag) RPES0881

### **Product Data:**

**Product SKU:** RPES0881 **Size:** 10μg

Species: Human Expression host: E. coli

**Uniprot:** POCE72

### **Protein Information:**

Molecular Mass: 14.3 kDa

AP Molecular Mass: 16 kDa

Tag: N-6His

**Bio-activity:** 

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:**  $< 1.0 \text{ EU per } \mu\text{g}$  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 a 0.2 μm filtered solution of 50mM Tris, 100mM NaCl, pH 7.5.

**Reconstitution:** Please refer to the printed manual for detailed information.

Application:

**Synonyms:** Oncomodulin; OM; Parvalbumin Beta; OCM; OCM1; OCMN

# Immunogen Information:

Sequence: Met 1-Ser109

## **Background:**

Oncomodulin (OM) is a small, calcium-binding protein and a macrophage-derived growth factor, which can promote axon regeneration in retinal ganglion cells. Oncomodulin is constitutively secreted by activated macrophages in the vitreous and retina in response to inflammatory conditions that promote optic nerve regeneration. Oncomodulin binds RGCs with high affinity in vitro, but only when cAMP is pharmacologically elevated or if the membrane is permeabilized allowing Oncomodulin access to the cytosolic compartment. Oncomodulin is a member of the superfamily of calmodulin proteins and is a high-affinity calcium ion-binding protein and contains 2 EF-hand domains. OM is found in early embryonic cells in the placenta and also in tumors. It has some calmodulin-like activity with respect to enzyme activation and growth regulation.