

# Recombinant Human Oncomodulin-1/OCM Protein (His Tag)

Catalog Number: PKSH032834



**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

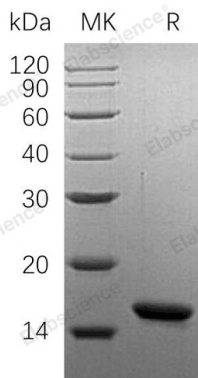
## Description

<b>Species</b>	Human
<b>Mol_Mass</b>	14.3 kDa
<b>Accession</b>	P0CE72
<b>Bio-activity</b>	Not validated for activity

## Properties

<b>Purity</b>	> 95 % as determined by reducing SDS-PAGE.
<b>Endotoxin</b>	< 1.0 EU per µg of the protein as determined by the LAL method.
<b>Storage</b>	Generally, 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.
<b>Shipping</b>	This product is provided as lyophilized powder which is shipped with ice packs.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution of 50mM Tris-HCl, 100mM NaCl, pH 8.0. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
<b>Reconstitution</b>	Please refer to the printed manual for detailed information.

## Data



> 95 % as determined by reducing SDS-PAGE.

## Background

Oncomodulin-1 (OM) is a small, calcium-binding protein and a macrophage-derived growth factor, which can promote axon regeneration in retinal ganglion cells. Oncomodulin-1 is constitutively secreted by activated macrophages in the vitreous and retina in response to inflammatory conditions that promote optic nerve regeneration. Oncomodulin-1 binds RGCs with high affinity in vitro, but only when cAMP is pharmacologically elevated or if the membrane is permeabilized allowing Oncomodulin-1 access to the cytosolic compartment. Oncomodulin-1 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.

## For Research Use Only