

Optineurin Protein, Human, Recombinant (His & GST)

General Information

Synonyms:	optineurin;HIP7;ALS12;HYPL;TFIIIA-INTP;FIP2;NRP;GLC1E
Protein Construction:	A DNA sequence encoding the human OPTN (NP_068815.2) (Met1-Ile577) was expressed with the N-terminal polyhistidine-tagged GST tag at the N-terminus. Predicted N terminal: Met
Species:	Human
Expression Host:	Baculovirus Insect Cells
Accession:	Q96CV9-1
Molecular Weight:	93.7 kDa (predicted); 94 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing 20 mM Tris, 500 mM NaCl, 10% glycerol, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:
A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

OPTN (Optineurin) is a Protein Coding gene. The Optineurin gene encodes the coiled-coil containing protein optineurin. Optineurin is a multifunctional adaptor protein intimately involved in various vesicular trafficking pathways. Through interactions with an array of proteins, such as myosin VI, huntingtin, Rab8, and Tank-binding kinase 1, as well as via its oligomerization, optineurin can act as an adaptor, scaffold, or signal regulator to coordinate many cellular processes associated with the trafficking of membrane-delivered cargo. It is widely

A DRUG SCREENING EXPERT

expressed in fat, adrenal, and other tissues. Certain mutations in OPTN (gene OPTN) are associated with primary open-angle glaucoma, a leading cause of irreversible blindness, and amyotrophic lateral sclerosis, a fatal motor neuron disease.

Reference

Rezaie T. et al., 2002, Science. 295 (5557): 1077-9.

Li Y. et al., 1998, Mol Cell Biol. 18 (3): 1601-10.

Skarnes Wc RB. et al., 2011, Nature. 474 (7351): 337-42.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481