

Product datasheet

Recombinant Human Optineurin protein ab153049

1 Image

Description

Product name	Recombinant Human Optineurin protein
Expression system	Wheat germ
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	<p>MSHQPLSCLTEKEDSPSESTGNGPPHLAHPNLDFTPEE LLQQMKELLTE NHQLKEAMKLNNQAMKGRFEELSAWTEKQKEERQFFEIQ SKEAKERLMAL SHENEKLKEELGKLGKSERSSDPTDDSRLPRAEAEQE KDQLRTQVVRL QAEKADLLGIVSELQLKLNSSGSSSEDSFVEIRMAEGEAEQ SVKEIKHSPG PTRTVSTGTSRSDGAKNYFEHEELTVSQLLLCLREGNQK VERLEVALKE AKERVSDFEKKTNRSEIETQTEGSTEKENDEEKGPETV GSEVEALNLQV TSLFKELQEAHTKLSEAELMKKRLQEKCQALERKNSAIPS ELNEKQELVY TNKKLELQVESMLSEIKMEQAKTEDEKSKLTVLQMTHNKL LQEHNNALKT IEELTRKESEKVDRAVLKELSEKLELAEKALASKQLQMD MKQTIKQEE DLETMTILRAQMEVYCSDFHAERAAREKIHEEKEQLALQL AVLLKENDAF EDGGRQSLMEMQSRHGARTSDSDQQAAYLVQRGAEDRD WRQQRNIPIHSCP KCGEVLPDIDTLQIHVMDCI</p>
Amino acids	1 to 571
Tags	GST tag N-Terminus

Specifications

Our [Abpromise guarantee](#) covers the use of **ab153049** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	ELISA Western blot
Form	Liquid
Additional notes	

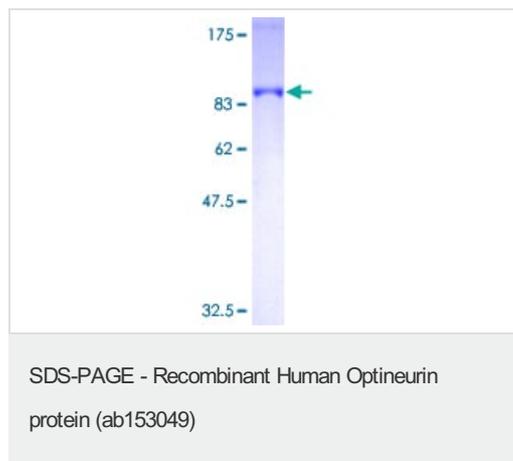
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.31% Glutathione, 0.79% Tris HCl
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General Info

Function	Plays an important role in the maintenance of the Golgi complex, in membrane trafficking, in exocytosis, through its interaction with myosin VI and Rab8. Links myosin VI to the Golgi complex and plays an important role in Golgi ribbon formation. Negatively regulates the induction of IFNB in response to RNA virus infection. Plays a neuroprotective role in the eye and optic nerve. Probably part of the TNF-alpha signaling pathway that can shift the equilibrium toward induction of cell death. May act by regulating membrane trafficking and cellular morphogenesis via a complex that contains Rab8 and huntingtin (HD). May constitute a cellular target for adenovirus E3 14.7, an inhibitor of TNF-alpha functions, thereby affecting cell death.
Tissue specificity	Present in aqueous humor of the eye (at protein level). Highly expressed in trabecular meshwork. Expressed nonpigmented ciliary epithelium, retina, brain, adrenal cortex, fetus, lymphocyte, fibroblast, skeletal muscle, heart, liver, brain and placenta.
Involvement in disease	Defects in OPTN are the cause of primary open angle glaucoma type 1E (GLC1E) [MIM:137760]. Primary open angle glaucoma (POAG) is characterized by a specific pattern of optic nerve and visual field defects. The angle of the anterior chamber of the eye is open, and usually the intraocular pressure is increased. The disease is asymptomatic until the late stages, by which time significant and irreversible optic nerve damage has already taken place. Defects in OPTN are a cause of susceptibility to normal pressure glaucoma (NPG) [MIM:606657]. Defects in OPTN are the cause of amyotrophic lateral sclerosis type 12 (ALS12) [MIM:613435]. It is a neurodegenerative disorder affecting upper motor neurons in the brain and lower motor neurons in the brain stem and spinal cord, resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology of amyotrophic lateral sclerosis is likely to be multifactorial, involving both genetic and environmental factors. The disease is inherited in 5-10% of the cases.
Domain	Ubiquitin-binding motif (UBAN) is essential for its inhibitory function, subcellular localization and interaction with TBK1.
Post-translational modifications	Phosphorylated. Phosphorylation is induced by phorbol esters and decreases its half-time.
Cellular localization	Cytoplasm > perinuclear region. Golgi apparatus. Golgi apparatus > trans-Golgi network. Found in the perinuclear region and associates with the Golgi apparatus. Colocalizes with MYO6 and RAB8 at the Golgi complex and in vesicular structures close to the plasma membrane.

Images



ab153049 on a 12.5% SDS-PAGE stained with Coomassie Blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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