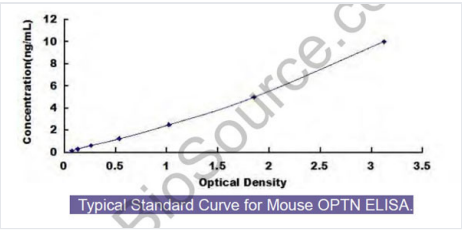
Optineurin (OPTN) ELISA Kit for Mouse

PRODUCT OVERVIEW

Product Name	Optineurin (OPTN), ELISA Kit
Full Product Name	Mouse Optineurin (OPTN) ELISA Kit
Product Gene Name	OPTN elisa kit
Product Synonym Names	NRP; FIP2; GLC1E; HIP7; HYPL; TFIIIA-INTP; Glaucoma 1,Open Angle,E(Adult-Onset); Huntingtin-interacting protein 7; Optic neuropathy-inducing protein; E3-14.7K-interacting protein
Species Reactivity	Mouse
Assay Type	Quantitative Sandwich
Samples	Mouse tissue homogenates or other biological fluids
Detection Range	0.156-10ng/mL
Sensitivity	< 0.051ng/mL
Specificity	This assay has high sensitivity and excellent specificity for detection of OPTN. No significant cross-reactivity or interference between OPTN and analogues was observed.
Preparation and Storage	For unopened kit, all reagents should be kept according to the labels on vials. The TMB Substrate, Wash Buffer, Stop Solution should be stored at 4 degree C. All others should be stored at -20 degree C.
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level OPTN were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<12%
Intra-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level OPTN were tested 20 times on one plate, respectively. Intra-Assay: CV<10%
Molecular Weight	67,018 Da
3D Structure	ModBase 3D Structure for Q8K3K8
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for OPTN elisa kit	Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to OPTN. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific to OPTN. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain OPTN, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of OPTN in the samples is then determined by comparing the O.D. of the samples to the standard curve. Intended Uses: The kit is a sandwich enzyme immunoassay for the in vitro quantitative measurement of OPTN in mouse tissue homogenates or other biological fluids.
Other Notes	Small volumes of OPTN elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

Searchable Terms for OPTN purchase	MBS451663 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Optineurin (OPTN) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing OPTN. The ELISA analytical biochemical technique of the MBS451663 kit is based on OPTN antibody-OPTN antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect OPTN antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, OPTN. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of OPTN elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for OPTN. It may not necessarily be applicable to this product.

NCBI GI #	32469491
NCBI GeneID	71648
NCBI Accession #	NP_862896.1
UniProt Primary Accession #	Q8K3K8
UniProt Secondary Accession #	A2ASP3
UniProt Related Accession #	Q8K3K8
GenBank Nucleotide #	NM_181848.4
NCBI Official Full Name	optineurin
NCBI Official Synonym Full Names	optineurin
NCBI Official Symbol	Optn
NCBI Official Synonym Symbols	NRP; FIP2; HYPL; 4930441O07Rik
UniProt Protein Name	Optineurin
Protein Family	Optineurin
UniProt Gene Name	Optn
NCBI Protein Information	optineurin
UniProt Comments for OPTN	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 hungtingtin (HD). Mediates the interaction of Rab8 with the probable GTPase-activating protein TBC1D17 during Rab8-mediated endocytic trafficking, such as of transferrin receptor (TFRC/TfR); regulates Rab8 recruitnment to tubules emanating from the endocytic recycling compartment. Autophagy receptor that interacts directly with both the cargo to become degraded and an autophagy modifier of the MAP1 LC3 family; targets ubiquitin-coated bacteria (xenophagy) and appears to function in the same pathway as SQSTM1 and CALCOCO2/NDP52 ().
Research Articles on OPTN	**1.** OPTN-deficient mice were more susceptible to infection with Salmonella, confirming in vivo the importance of OPTN in bacterial clearance.

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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