For Research Use Only

LONP1 Monoclonal antibody, PBS Only (Capture)



Purification Method:

CloneNo.:

1C6C12

Protein G purification

Catalog Number: 66043-1-PBS

Featured Product

Basic Information

Catalog Number: GenBank Accession Number:

66043-1-PBS BC00023

Size: Genel D (NCBI):

100ug , Concentration: 1mg/ml by 9361 Nanodrop; UNIP

Nanodrop; UNIPROT ID:
Source: P36776
Mouse Full Name:

lsotype: lon peptidase 1, mitochondrial

IgG1Calculated MW:Immunogen Catalog Number:106 kDaAG7306Observed MW:

100 kDa

Applications

Tested Applications:

WB, IHC, IF/ICC, Cytometric bead array, Indirect ELISA

Species Specificity: human, mouse, rat

Product Information

66043-1-PBS targets LONP1 as part of a matched antibody pair:

MP50672-1: 66043-1-PBS capture and 66043-2-PBS detection (validated in Cytometric bead array)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

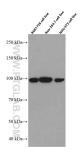
Background Information

LONP1(Lon protease homolog, mitochondrial) is also named as LONP, LONHS, HLON, LON, PRSS15, PIM1, MGC1498 and belongs to the peptidase S16 family. It seems to play a major role in the elimination of oxidatively modified proteins in the mitochondrial matrix(PMID:18021745). LONP1, also a nuclearly encoded and mitochondrially located stress-responsive protease, is involved in heme-mediated ALAS-1 turnover(PMID:21659532). It recognizes specific surface determinants or folds, initiates proteolysis at solvent-accessible sites, and generates unfolded polypeptides that are then processively degraded(PMID:15870080).

Storage

Storage: Store at -80°C. Storage Buffer: PBS Only

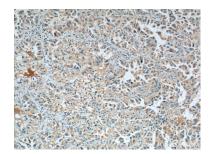
Selected Validation Data



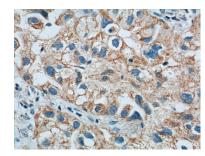
Various lysates were subjected to SDS PAGE followed by western blot with 66043-1-lg (LONP1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66043-1-PBS in a different storage buffer formulation.



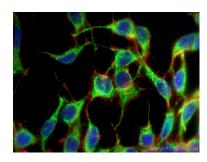
Jurkat cells were subjected to SDS PAGE followed by western blot with 66043-1-lg (LONP1 Antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66043-1-PBS in a different storage buffer formulation.



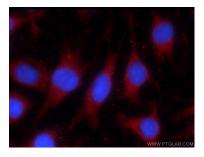
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66043-1-lg (LONP1 Antibody) at dilution of 1:800 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66043-1-PBS in a different storage buffer formulation.



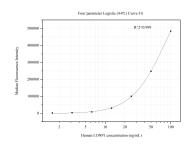
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66043-1-lg (LONP1 Antibody) at dilution of 1:800 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66043-1-PBS in a different storage buffer formulation



Immunofluorescent analysis of (-20°C Ethanol) fixed C6 cells using LONP1 antibody (66043-1-Ig, Clone: 1C6C12) at dilution of 1:200 and CoraLite@488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red). This data was developed using the same antibody clone with 66043-1-PBS in a different storage buffer formulation



Immunofluorescent analysis of C6 cells using 66043-1-Ig (LONP1 antibody) at dilution of 1:25 and Rhodamine-Goat anti-Mouse IgG. This data was developed using the same antibody clone with 66043-1-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP50672-1, LONP1 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66043-1-PBS. Detection antibody: 66043-2-PBS. Standard:Ag7306. Range: 1.563-100 ng/mL