For Research Use Only

Mouse P62/SQSTM1 Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number:84826-1-PBS



Purification Method:

Protein A purification

CloneNo.:

241992C4

Basic Information

Catalog Number: GenBank Accession Number:

100ug , Concentration: 1 mg/ml by 18412

Nanodrop; UNIPROT ID:

Source: Q64337

Rabbit Full Name:

Isotype: sequestosome 1

IgG Calculated MW:

Immunogen Catalog Number: 48 kDa
AG35064 Observed MI

G35064 Observed MW: 62 kDa

Applications Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity: human, mouse, rat

Product Information

84826-1-PBS targets P62/SQSTM1 as part of a matched antibody pair:

MP01608-1: 84826-2-PBS capture and 84826-1-PBS detection (validated in Cytometric bead array)

MP01608-2: 84826-1-PBS capture and 84826-2-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

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.

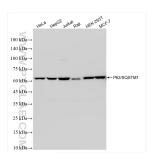
Background Information

Sequestosome 1 (SQSTM1/p62) is a multifunctional adaptor protein implicated in selective autophagy, cell signaling pathways, and tumorigenesis. p62 has been implicated in shuttling ubiquitinated and aggregated proteins for autophagic degradation. p62 is degraded during the autophagic process, which makes its intracellular level a marker for autophagy progression. p62 is at the cross-roads of several signaling pathways including Ras/ Raf/ MAPK and NFkB and plays important role in cancer.

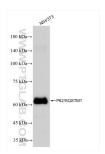
Storage

Storage: Store at -80°C. Storage Buffer: PBS only, pH7.3

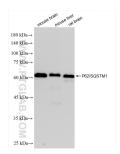
Selected Validation Data



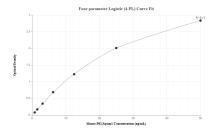
Various lysates were subjected to SDS PAGE followed by western blot with 84826-1-RR (P62/SQSTM1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84826-1-PBS in a different storage buffer formulation.



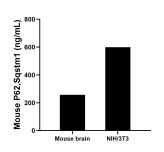
NIH/3T3 cells were subjected to SDS PAGE followed by western blot with 84826-1-RR (P62/SQSTM1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84826-1-PBS in a different storage buffer formulation



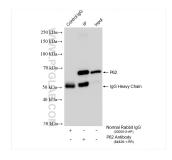
Various lysates were subjected to SDS PAGE followed by western blot with 84826-1-RR (P62/SQSTM1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 84826-1-PBS in a different storage buffer formulation.



Sandwich ELISA standard curve of MP01608-2, Mouse P62,Sqstm1 Recombinant Matched Antibody Pair - PBS only. 84826-1-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag35064. 84826-2-PBS was HRP conjugated as the detection antibody. Range: 0.781-50 ng/mL



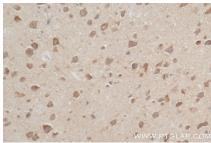
The mean P62,Sqstm1 concentration was determined to be 257.13 ng/mL in mouse brain tissue extract based on a 1.6 mg/mL extract load and 598.93 ng/mL in NIH/3T3 cell extract based on a 1.5 mg/mL extract load.



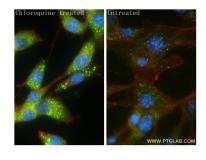
IP result of anti-P62/SQSTM1 (IP:84826-1-RR, 4ug; Detection:84826-1-RR 1:4000) with NIH/3T3 cells lysate 1920 ug. This data was developed using the same antibody clone with 84826-1-PBS in a different storage buffer formulation.



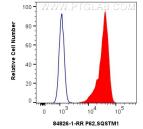
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 84826-1-RR (P62/SQSTM1 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84826-1-PBS in a different storage buffer formulation.

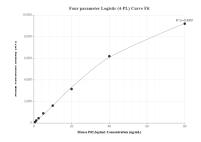


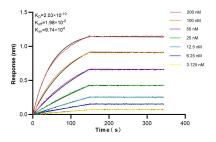
Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 84826-1-RR (P62/SQSTM1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 84826-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed NIH/3T3 cells using P62/SQSTM1 antibody (84826-1-RR, Clone: 241992C4) at dilution of 1:500 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA0013-2), CL594-Phalloidin (red). This data was developed using the same antibody clone with 84826-1-PBS in a different storage buffer formulation.







1x10^6 NIH/3T3 cells were intracellularly stained with 0.25 ug P62/SQSTM1
Recombinant antibody (84826-1-RR, Clone:241992C4) and CoraLite® 488-Conjugated Goat Anti-Rabbit 1gG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit 1gG Isotype Control RecAb (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone

Cytometric bead array standard curve of MP01608-1, MOUSE P62, Sqstm1 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 84826-2-PBS. Detection antibody: 84826-1-PBS. Standard: Ag35064. Range: 0.625-80 ng/mL

Biolayer interferometry (BLL) kinetic assays of 84826-1-RR against Mouse P62,SQSTM1 were performed. The affinity constant is 0.203 nM.