abcam

Product datasheet

Anti-SQSTM1 / p62 antibody ab264313

3 Images

Overview

Product name	Anti-SQSTM1 / p62 antibody
Description	Rabbit polyclonal to SQSTM1 / p62
Host species	Rabbit
Tested applications	**Suitable for:** IHC-P, IP, WB
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Rat, Orangutan
Immunogen	Synthetic peptide within Human SQSTM1/ p62 aa 325-375. The exact sequence is proprietary. NP_003891.1 Database link: **Q13501**
Positive control	IHC-P: Human breast carcinoma tissue. WB: HeLa, HEK-293T and NIH/3T3 whole cell lysate. IP: HeLa whole cell lysate.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7 Preservative: 0.09% Sodium azide Constituent: Tris citrate/phosphate pH 7 to 8
Purity	Immunogen affinity purified
Clonality	Polyclonal

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab264313 in the following tested applications.

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

Application	Abreviews	Notes
IHC-P		1/500 - 1/2000. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		Use at 2-5 µg/mg of lysate.
WB		1/2000 - 1/10000. Predicted molecular weight: 48 kDa.

Target

Function Adapter protein which binds ubiquitin and may regulate the activation of NFKB1 by TNF-alpha, nerve growth factor (NGF) and interleukin-1. May play a role in titin/TTN downstream signaling in muscle cells. May regulate signaling cascades through ubiquitination. Adapter that mediates the interaction between TRAF6 and CYLD (By similarity). May be involved in cell differentiation, apoptosis, immune response and regulation of K(+) channels.

Tissue specificity Ubiquitously expressed.

Involvement in disease Defects in SQSTM1 are a cause of Paget disease of bone (PDB) [MIM:602080]. PDB is a metabolic bone disease affecting the axial skeleton and characterized by focal areas of increased and disorganized bone turn-over due to activated osteoclasts. Manifestations of the disease include bone pain, deformity, pathological fractures, deafness, neurological complications and increased risk of osteosarcoma. PDB is a chronic disease affecting 2 to 3% of the population above the age of 40 years.

Sequence similarities Contains 1 OPR domain.
Contains 1 UBA domain.
Contains 1 ZZ-type zinc finger.

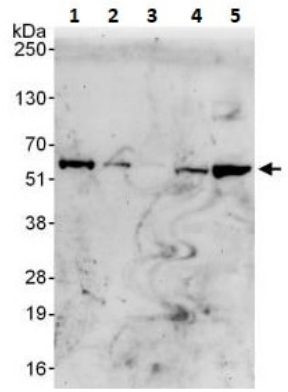
Domain The UBA domain binds specifically 'Lys-63'-linked polyubiquitin chains of polyubiquitinated substrates. Mediates the interaction with TRIM55.
The OPR domain mediates homooligomerization and interactions with PRKCZ, PRKCI, MAP2K5 and NBR1.
The ZZ-type zinc finger mediates the interaction with RIPK1.

Post-translational modifications Phosphorylated. May be phosphorylated by PRKCZ (By similarity). Phosphorylated in vitro by TTN.

Cellular localization Cytoplasm. Late endosome. Nucleus. Sarcomere (By similarity). In cardiac muscles localizes to the sarcomeric band (By similarity). Localizes to late endosomes. May also localize to the nucleus. Accumulates in neurofibrillary tangles and in Lewy bodies of neurons from individuals with Alzheimer and Parkinson disease respectively. Enriched in Rosenthal fibers of pilocytic

astrocytoma. In liver cells, accumulates in Mallory bodies associated with alcoholic hepatitis, Wilson disease, indian childhood cirrhosis and in hyaline bodies associated with hepatocellular carcinoma.

Images



Western blot - Anti-SQSTM1 / p62 antibody (ab264313)

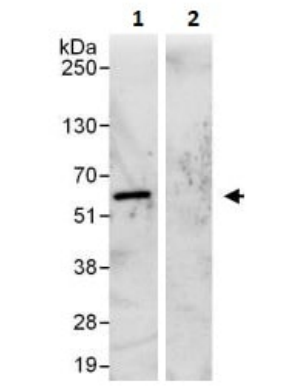
All lanes : Anti-SQSTM1 / p62 antibody (ab264313) at 0.1 µg/ml

Lane 1 : HeLa whole cell lysate at 50 µg
Lane 2 : HeLa whole cell lysate at 15 µg
Lane 3 : HeLa whole cell lysate at 5 µg
Lane 4 : HEK-293T whole cell lysate at 50 µg
Lane 5 : NIH/3T3 whole cell lysate at 50 µg

Developed using the ECL technique.

Predicted band size: 48 kDa

Exposure time: 30 seconds

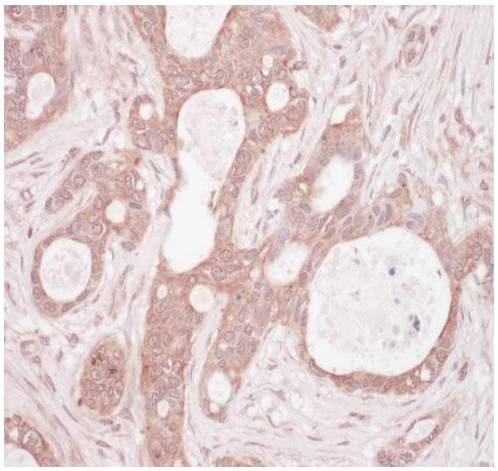


Immunoprecipitation - Anti-SQSTM1 / p62 antibody (ab264313)

SQSTM1 / p62 was immunoprecipitated from 1mg of HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab264313 at 3 µg/mg lysate. Western blot was performed from the immunoprecipitate using ab264313 at 0.4 µg/ml.

Lane 1: ab264313 IP in HeLa whole cell lysate.
Lane 2: Control IgG.

Exposure time: 3 secs.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-SQSTM1 / p62 antibody (ab264313)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded human breast carcinoma tissue labeling SQSTM1 / p62 with ab264313 at 1/1,000 dilution.

Epitope retrieval with citrate buffer pH 6.0 is recommended for FFPE tissue sections.

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