abcam

Product datasheet

PE Anti-SQSTM1 / p62 antibody [EPR18351] ab225454

Recombinant

RabMAb

2 Images

Overview

Product name PE Anti-SQSTM1 / p62 antibody [EPR18351]

Description PE Rabbit monoclonal [EPR18351] to SQSTM1 / p62

Host species Rabbit

ConjugationPE. Ex: 488nm, Em: 575nmTested applicationsSuitable for: Flow Cyt (Intra)

Species reactivity Reacts with: Human

Immunogen Recombinant full length protein within Human SQSTM1/ p62 aa 1 to the C-terminus. The exact

immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please

contact our Scientific Support team to discuss your requirements.

Database link: Q13501

Positive control Flow Cyt (intra): HeLa cells +/- Chloroquine (50ÂμΜ, 24 hours).

General notesThis product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at +4°C. Store

In the Dark.

Storage buffer pH: 7.4

Preservative: 0.02% Sodium azide Constituents: 1% BSA, PBS

Purity Protein A purified

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ClonalityMonoclonalClone numberEPR18351

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab225454 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
Flow Cyt (Intra)		1/5000. The cellular localisation of this product has been verified in ICC/IF.

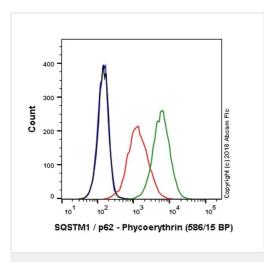
Target		
Function	Adapter protein which binds ubiquitin and may regulate the activation of NFKB1 by TNF-alpha, nerve growth factor (NGF) and interleukin-1. May play a role in titin/TTN downstream signaling in muscle cells. May regulate signaling cascades through ubiquitination. Adapter that mediates 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	

carcinoma.

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

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Images



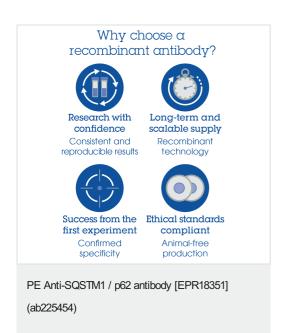
Flow Cytometry (Intracellular) - PE Anti-SQSTM1 / p62 antibody [EPR18351] (ab225454)

Overlay histogram showing HeLa cells untreated (red line) and HeLa cells treated with Chloroquine, $50\mu\text{M}$, 24 hours, (green line) stained with ab225454. The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab225454, 1/5000 dilution) for 30 min at 22°C.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Phycoerythrin (<u>ab209478</u>) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5,000 events were collected using a 50 mW Yellow/Green laser (561nm) and 586/15 bandpass filter.

This antibody gave a positive signal in HeLa +/- Chloroquine cells fixed with 4% formaldehyde (10 min)/permeabilized with 0.1% PBS-Triton X-100 for 15 min used under the same conditions.



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