

## Product datasheet

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# ARG54989 anti-SQSTM1 / p62 antibody [1336CT763.152.125]

Package: 100 μl Store at: -20°C

#### **Summary**

Product Description Mouse Monoclonal antibody recognizes SQSTM1 / p62

Tested Reactivity Hu
Tested Application WB

Host Mouse

**Clonality** Monoclonal

Clone 1336CT763.152.125

Isotype IgG1, kappa

Target Name SQSTM1 / p62

Immunogen Recombinant SQSTM1 protein.

Conjugation Un-conjugated

Alternate Names FTDALS3; p60; p62; EBI3-associated protein of 60 kDa; p62B; Sequestosome-1; Ubiquitin-binding

protein p62; PDB3; OSIL; Phosphotyrosine-independent ligand for the Lck SH2 domain of 62 kDa; EBIAP;

A170; ZIP3

#### **Application Instructions**

Application table	Application	Dilution
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	A549	

#### **Properties**

Form Liquid

Purification Purification with Protein G.

Buffer PBS and 0.09% (W/V) Sodium azide

Preservative 0.09% (W/V) Sodium azide

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed

before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Database links GenelD: 8878 Human

Swiss-port # Q13501 Human

Gene Symbol SQSTM1

Gene Full Name sequestosome 1

Background SQSTM1 / p62 is a multifunctional protein that binds ubiquitin and regulates activation of the nuclear

factor kappa-B (NF-kB) signaling pathway. The protein functions as a scaffolding/adaptor protein in concert with TNF receptor-associated factor 6 to mediate activation of NF-kB in response to upstream signals. Alternatively spliced transcript variants encoding either the same or different isoforms have been identified for this gene. Mutations in this gene result in sporadic and familial Paget disease of

bone. [provided by RefSeq, Mar 2009]

Function SQSTM1 / p62: Autophagy receptor required for selective macroautophagy (aggrephagy). Functions as

a bridge between polyubiquitinated cargo and autophagosomes. Interacts directly with both the cargo to become degraded and an autophagy modifier of the MAP1 LC3 family (PubMed:16286508, PubMed:20168092, PubMed:24128730, PubMed:28404643, PubMed:22622177). Along with WDFY3, involved in the formation and autophagic degradation of cytoplasmic ubiquitin-containing inclusions (p62 bodies, ALIS/aggresome-like induced structures). Along with WDFY3, required to recruit ubiquitinated proteins to PML bodies in the nucleus (PubMed:24128730, PubMed:20168092). 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. May be involved in cell differentiation, apoptosis, immune response and regulation of K(+) channels. Involved in endosome organization by retaining vesicles in the perinuclear cloud: following ubiquitination by RNF26, attracts specific vesicle-associated adapters, forming a molecular bridge that restrains cognate vesicles in the perinuclear region and organizes the endosomal pathway for efficient cargo transport

(PubMed:27368102). Promotes relocalization of 'Lys-63'-linked ubiquitinated TMEM173/STING to autophagosomes (PubMed:29496741). Acts as an activator of the NFE2L2/NRF2 pathway via interaction with KEAP1: interaction inactivates the BCR(KEAP1) complex, promoting nuclear accumulation of

NFE2L2/NRF2 and subsequent expression of cytoprotective genes (PubMed:20452972,

PubMed:28380357). [UniProt]

Highlight Related products:

SQSTM1 antibodies; SQSTM1 Duos / Panels; Anti-Mouse IgG secondary antibodies;

Related news:

<u>Keap1-Nrf2-ARE antibody panel is launched</u> <u>Therapeutic strategies against PDAC</u>

Research Area Cancer antibody; Cell Biology and Cellular Response antibody; Cell Death antibody; Gene Regulation

antibody; Metabolism antibody; Signaling Transduction antibody; Autophagy Study antibody

Calculated Mw 48 kDa

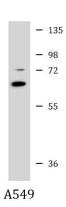
PTM Phosphorylated. May be phosphorylated by PRKCZ (By similarity). Phosphorylated in vitro by TTN.

Phosphorylation at Ser-403 by ULK1 is stimulated by SESN2 (PubMed:25040165).

Ubiquitinated by RNF26: ubiquitinated SQSTM1 attracts specific vesicle-associated adapters, forming a molecular bridge that restrains cognate vesicles in the perinuclear region and organizes the endosomal pathway for efficient cargo transport (PubMed:27368102). Deubiquitination by USP15 releases target

vesicles for fast transport into the cell periphery (PubMed:27368102).

Cellular Localization Cytoplasmic vesicle, Endoplasmic reticulum, Endosome, Lysosome, Nucleus



### ARG54989 anti-SQSTM1 / p62 antibody WB image

Western blot: 20  $\mu g$  of A549 cell lysate stained with ARG54989 anti-SQSTM1 / p62 antibody at 1:1000 dilution.