

ARG56209 anti-Ubiquilin 1 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Ubiquilin 1
Tested Reactivity	Hu, Ms
Predict Reactivity	Rat
Tested Application	ICC/IF, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Ubiquilin 1
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 296-326 (Center) of Human Ubiquilin 1.
Conjugation	Un-conjugated
Alternate Names	XDRP1; PLIC-1; DA41; DSK2; UBQN; Protein linking IAP with cytoskeleton 1; hPLIC-1; Ubiquilin-1

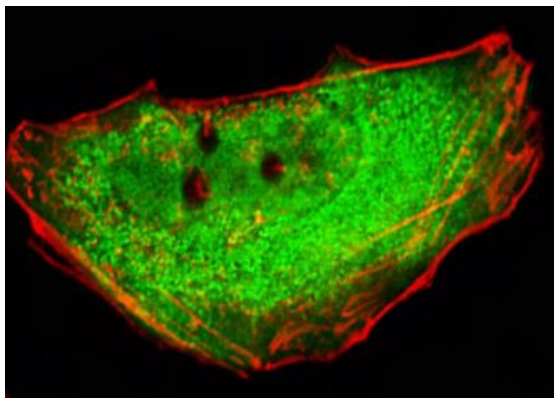
Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100
	IHC-P	1:50 - 1:100
	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	SH-SY5Y	

Properties

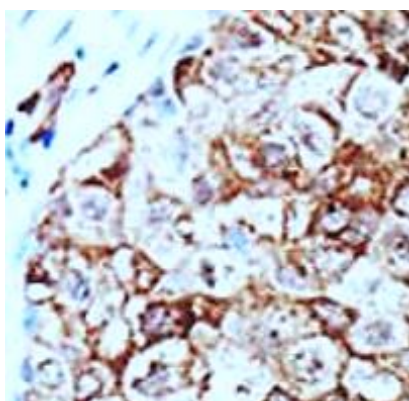
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.09% (W/V) Sodium azide.
Preservative	0.09% (W/V) Sodium azide.
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost 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.

Database links	GeneID: 29979 Human GeneID: 56085 Mouse Swiss-port # Q8R317 Mouse Swiss-port # Q9UMX0 Human
Gene Symbol	UBQLN1
Gene Full Name	ubiquilin 1
Background	This gene encodes an ubiquitin-like protein (ubiquilin) that shares a high degree of similarity with related products in yeast, rat and frog. Ubiquilins contain an N-terminal ubiquitin-like domain and a C-terminal ubiquitin-associated domain. They physically associate with both proteasomes and ubiquitin ligases, and thus are thought to functionally link the ubiquitination machinery to the proteasome to affect in vivo protein degradation. This ubiquilin has also been shown to modulate accumulation of presenilin proteins, and it is found in lesions associated with Alzheimer's and Parkinson's disease. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]
Function	Plays an important role in the regulation of different protein degradation mechanisms and pathways including ubiquitin-proteasome system (UPS), autophagy and endoplasmic reticulum-associated protein degradation (ERAD) pathway. Mediates the proteasomal targeting of misfolded or accumulated proteins for degradation by binding (via UBA domain) to their polyubiquitin chains and by interacting (via ubiquitin-like domain) with the subunits of the proteasome. Plays a role in the ERAD pathway via its interaction with ER-localized proteins UBXN4, VCP and HERPUD1 and may form a link between the polyubiquitinated ERAD substrates and the proteasome. Isoform 1, isoform 2 and isoform 3 play a role in unfolded protein response (UPR) by attenuating the induction of UPR-inducible genes, DDI3/CHOP, HSPA5 and PDIA2 during ER stress. Involved in the regulation of macroautophagy and autophagosome formation; required for maturation of autophagy-related protein LC3 from the cytosolic form LC3-I to the membrane-bound form LC3-II and may assist in the maturation of autophagosomes to autolysosomes by mediating autophagosome-lysosome fusion. Negatively regulates the TICAM1/TRIF-dependent toll-like receptor signaling pathway by decreasing the abundance of TICAM1 via the autophagic pathway. Isoform 1 and isoform 3 play a key role in the regulation of the levels of PSEN1 by targeting its accumulation to aggresomes which may then be removed from cells by autophagocytosis. Promotes the ubiquitination and lysosomal degradation of ORAI1, consequently downregulating the ORAI1-mediated Ca²⁺ mobilization. Suppresses the maturation and proteasomal degradation of amyloid beta A4 protein (A4) by stimulating the lysine 63 (K63)-linked polyubiquitination. Delays the maturation of A4 by sequestering it in the Golgi apparatus and preventing its transport to the cell surface for subsequent processing (By similarity). [UniProt]
Calculated Mw	63 kDa
PTM	Degraded during both macroautophagy and during chaperone-mediated autophagy (CMA). Phosphorylated. Ubiquitinated.
Cellular Localization	Cytoplasm. Nucleus. Note=Detected in neuronal processes and at synapses (By similarity). Detected in cytosolic puncta that may correspond to autophagosomes.



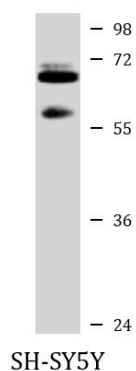
ARG56209 anti-Ubiquilin 1 antibody ICC/IF image

Immunofluorescence: HeLa cells stained with ARG56209 anti-Ubiquilin 1 antibody (green) at 1:100 dilution. Cytoplasmic actin was counterstained with Dylight Fluor® 554 conjugated with Phalloidin (red).



ARG56209 anti-Ubiquilin 1 antibody IHC-P image

Immunohistochemistry: Formalin-fixed and paraffin-embedded Human breast carcinoma stained with ARG56209 anti-Ubiquilin 1 antibody.



ARG56209 anti-Ubiquilin 1 antibody WB image

Western blot: 35 µg of SH-SY5Y cell lysate stained with ARG56209 anti-Ubiquilin 1 antibody.