

## ARG43002 anti-SESN2 / Sestrin 2 antibody

Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Rabbit Polyclonal antibody recognizes SESN2 / Sestrin 2
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, ICC/IF, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	SESN2 / Sestrin 2
Species	Human
Immunogen	Recombinant protein of Human SESN2 / Sestrin 2.
Conjugation	Un-conjugated
Alternate Names	Sestrin-2; HI95; SES2; SEST2; HI95

### Application Instructions

Application table	Application	Dilution
	FACS	1:20
	ICC/IF	1:20
	IP	1:20
	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	K562	
Observed Size	~ 55 kDa	

### Properties

Form	Liquid
Purification	Affinity purified.
Buffer	50 mM Tris-Glycine (pH 7.4), 150 mM NaCl, 0.01% Sodium azide, 40% Glycerol and 0.05% BSA.
Preservative	0.01% Sodium azide
Stabilizer	40% Glycerol and 0.05% BSA
Concentration	Batch dependent
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. 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.

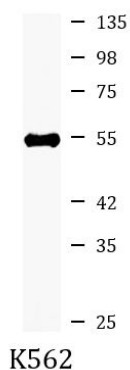
**Note**

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

## Bioinformation

Gene Symbol	SESN2
Gene Full Name	sestrin 2
Background	This gene encodes a member of the sestrin family of PA26-related proteins. The encoded protein may function in the regulation of cell growth and survival. This protein may be involved in cellular response to different stress conditions. [provided by RefSeq, Jul 2008]
Function	Functions as an intracellular leucine sensor that negatively regulates the TORC1 signaling pathway through the GATOR complex. In absence of leucine, binds the GATOR subcomplex GATOR2 and prevents TORC1 signaling (PubMed:18692468, PubMed:25263562, PubMed:25457612, PubMed:26449471, PubMed:26612684, PubMed:26586190). Binding of leucine to SESN2 disrupts its interaction with GATOR2 thereby activating the TORC1 signaling pathway (PubMed:26449471, PubMed:26586190). This stress-inducible metabolic regulator also plays a role in protection against oxidative and genotoxic stresses. May negatively regulate protein translation in response to endoplasmic reticulum stress, via TORC1 (PubMed:24947615). May positively regulate the transcription by NFE2L2 of genes involved in the response to oxidative stress by facilitating the SQSTM1-mediated autophagic degradation of KEAP1 (PubMed:23274085). May also mediate TP53 inhibition of TORC1 signaling upon genotoxic stress (PubMed:18692468). Has an alkylhydroperoxide reductase activity born by the N-terminal domain of the protein (PubMed:26612684). Was originally reported to contribute to oxidative stress resistance by reducing PRDX1 (PubMed:15105503). However, this could not be confirmed (PubMed:19113821). [UniProt]
Calculated Mw	54 kDa
PTM	Phosphorylated by ULK1 at multiple sites. [UniProt]
Cellular Localization	Cytoplasm. [UniProt]

## Images



ARG43002 anti-SESN2 / Sestrin 2 antibody WB image

Western blot: K562 cell lysate stained with ARG43002 anti-SESN2 / Sestrin 2 antibody at 1:1000 dilution.