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SESN1 Antibody

Rabbit mAb
Catalog # AP92464

Product Information

Application	WB, FC
Primary Accession	Q9Y6P5
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Other Names	PA26; sesn1; SEST1; sestrin 1;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	56557

Additional Information

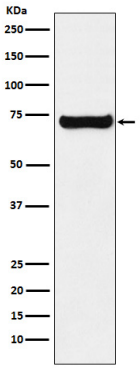
Dilution	WB 1:500~1:2000 FC 1:100
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human SESN1
Description	Involved in the reduction of peroxiredoxins. May also be regulator of cellular growth.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	SESN1 (HGNC:21595)
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. Binding of leucine to SESN2 disrupts its interaction with GATOR2 thereby activating the TORC1 signaling pathway (PubMed:25263562, PubMed:26449471). This stress-inducible metabolic regulator may also play a role in protection against oxidative and genotoxic stresses (By similarity). 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). Moreover, may prevent the accumulation of reactive oxygen species (ROS) through the alkylhydroperoxide reductase activity born by the N-terminal domain of the protein (By similarity). Was originally reported to contribute to oxidative stress resistance by reducing PRDX1 (PubMed:15105503). However, this could not be confirmed (By similarity).
Cellular Location	Nucleus. Cytoplasm

Tissue Location	Widely expressed..

Images



Western blot analysis of SESN1 expression in K562 cell lysate.