

Product Name: SESN1 (2D5) Rabbit Monoclonal Antibody
Catalog #: AMRe17771

Summary

Production Name	SESN1 (2D5) Rabbit Monoclonal Antibody
Description	Rabbit Monoclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% New type preservative N and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.
Purification	Affinity purification

Immunogen

Gene Name	SESN1
Alternative Names	PA26; sesn1; SEST1; sestrin 1;
Gene ID	27244.0
SwissProt ID	Q9Y6P5 .

Application

Dilution Ratio	WB 1:500-1:2000
Molecular Weight	57kDa

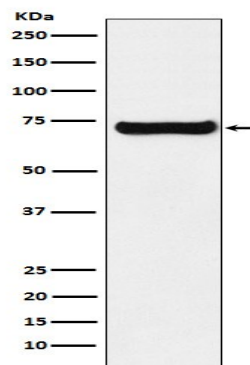
Product Name: SESN1 (2D5) Rabbit Monoclonal Antibody
Catalog #: AMRe17771

Background

Involved in the reduction of peroxiredoxins. May also be regulator of cellular growth. 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](http://www.uniprot.org/citations/25263562), PubMed: [26449471](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/15105503)). However, this could not be confirmed (By similarity).

Research Area

Image Data



Western blot analysis of SESN1 expression in K562 cell lysate.

Note

For research use only.