

Product Name: SESN2 Rabbit Monoclonal antibody
Catalog #: AMRe02589



Summary

Production Name	SESN2 Rabbit Monoclonal antibody
Description	Recombinant Rabbit Monoclonal antibody
Host	Rabbit
Application	WB, ICC/IF, IP
Reactivity	Human, Mouse, Rat

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal Antibody
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% protective protein
Purification	Affinity Purified

Immunogen

Gene Name	SESN2
Alternative Names	HI95; SES2; SEST2
Gene ID	83667
SwissProt ID	P58004.

Application

Dilution Ratio	WB: 1:500-1:1000 IF: 1:50-1:200 IP: 1:20
Molecular Weight	Calculated MW: 54 kDa; Observed MW: 54 kDa

Background

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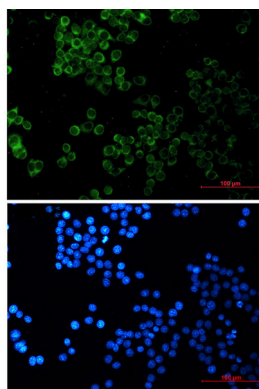


Functions as an intracellular leucine sensor that negatively regulates the TORC1 signaling pathway through the GATOR complex. In absence of leucine, binds the GATOR subcomplex GATOR2 and prevents TORC1 signaling (PubMed:18692468, PubMed:25263562, PubMed:25457612, PubMed:26449471, PubMed:26612684, PubMed:26586190). 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).

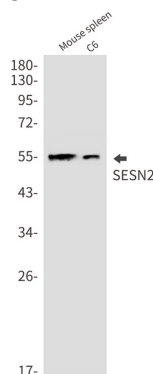
Research Area

Cardiovascular

Image Data

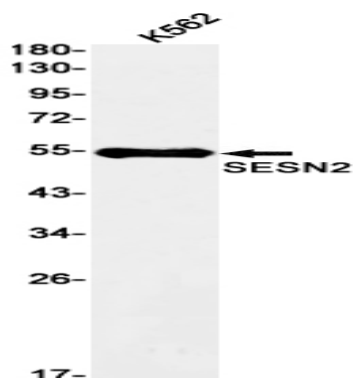


Immunocytochemistry analysis of SESN2 (green) in Hela using SESN2 antibody, and DAPI (blue).



Western blot analysis of SESN2 in mouse spleen, C6 lysates using SESN2 antibody.

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Western blot analysis of SESN2 in K562 lysates using SESN2 antibody

Note

For research use only.