

Anti-SESN1 Antibody
Rabbit polyclonal antibody to SESN1
Catalog # AP60780

Specification

Anti-SESN1 Antibody - Product Information

Application	WB
Primary Accession	O9Y6P5
Other Accession	P58006
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56557

Anti-SESN1 Antibody - Additional Information

Gene ID 27244

Other Names

PA26; SEST1; Sestrin-1; p53-regulated protein PA26

Target/Specificity

Recognizes endogenous levels of SESN1 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

Format

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage

Store at -20 °C. Stable for 12 months from date of receipt

Anti-SESN1 Antibody - 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

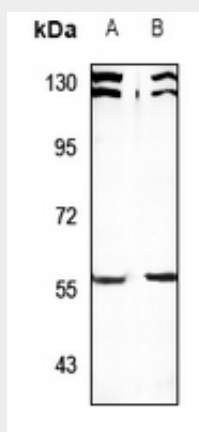
Widely expressed..

Anti-SESN1 Antibody - Protocols

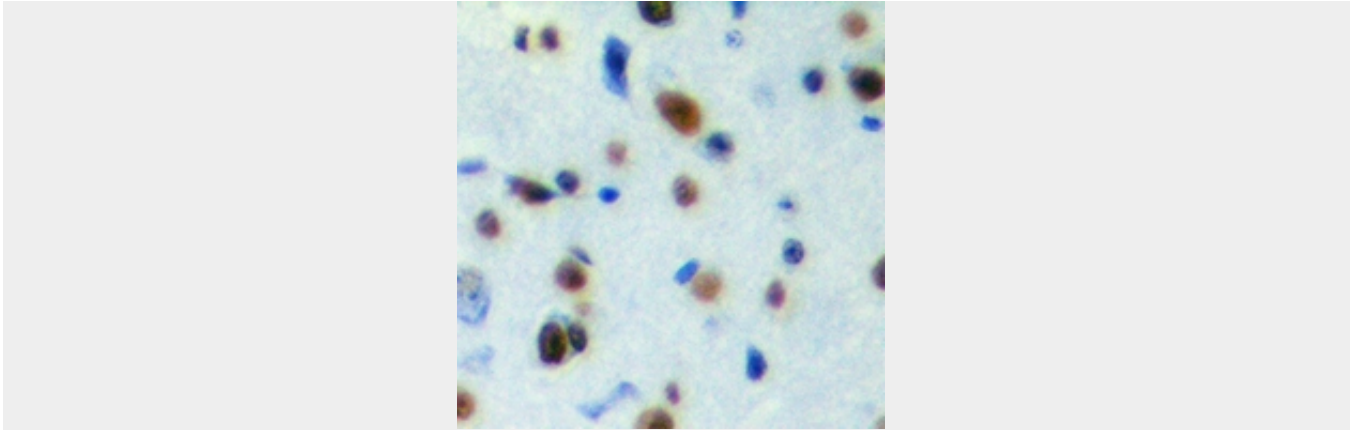
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-SESN1 Antibody - Images



Western blot analysis of SESN1 expression in HeLa (A), PC12 (B) whole cell lysates.



Immunohistochemical analysis of SESN1 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-SESN1 Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SESN1. The exact sequence is proprietary.