

**SESN1 (2D5) Rabbit Monoclonal Antibody**  
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**Catalog # AP93705****Specification**

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**SESN1 (2D5) Rabbit Monoclonal Antibody - Product Information**

Application	WB, FC
Primary Accession	<a href="#">Q9Y6P5</a>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Calculated MW	56557

**SESN1 (2D5) Rabbit Monoclonal Antibody - Additional Information****Gene ID** 27244**Other Names**

Sestrin-1, 1.11.1.-, p53-regulated protein PA26, SESN1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=21595" target="\_blank">HGNC:21595</a>)

**Dilution**

WB~~1:1000  
FC~~1:10~50

**Storage Conditions**

-20°C

**SESN1 (2D5) Rabbit Monoclonal 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:<a href="http://www.uniprot.org/citations/25263562" target="\_blank">25263562</a>, PubMed:<a href="http://www.uniprot.org/citations/26449471" target="\_blank">26449471</a>). 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:<a href="http://www.uniprot.org/citations/23274085" target="\_blank">23274085</a>). 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:<a href="http://www.uniprot.org/citations/15105503" target="\_blank">15105503</a>). However, this could not be confirmed (By similarity).

**Cellular Location**

Nucleus. Cytoplasm

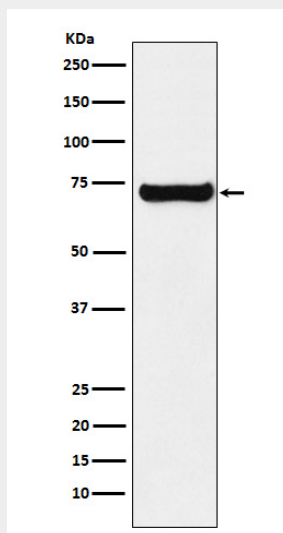
**Tissue Location**

Widely expressed..

**SESN1 (2D5) Rabbit Monoclonal 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](#)

**SESN1 (2D5) Rabbit Monoclonal Antibody - Images**

Western blot analysis of SESN1 expression in K562 cell lysate.