

Sestrin-1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP7650b**Specification**

Sestrin-1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9Y6P5](#)**Sestrin-1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 27244**Other Names**

Sestrin-1, p53-regulated protein PA26, SESN1, PA26, SEST1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP7650b](/products/AP7650b) was selected from the C-term region of human Sestrin-1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Sestrin-1 Antibody (C-term) Blocking Peptide - 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](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). However, this could not be confirmed (By similarity).

Cellular Location

Nucleus. Cytoplasm

Tissue Location

Widely expressed..

Sestrin-1 Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

Sestrin-1 Antibody (C-term) Blocking Peptide - Images**Sestrin-1 Antibody (C-term) Blocking Peptide - Background**

Sestrin-1 is involved in the reduction of peroxiredoxins. This protein may also be regulator of cellular growth.

Sestrin-1 Antibody (C-term) Blocking Peptide - References

Budanov,A.V., Science 304 (5670), 596-600 (2004)Peeters,H., Hum. Genet. 112 (5-6), 573-580 (2003)Velasco-Miguel,S., Oncogene 18 (1), 127-137 (1999)