10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# SESN1 (2D5) Rabbit Monoclonal Antibody

SESN1 (2D5) Rabbit Monoclonal Antibody
Catalog # AP93705

## Product Information

| | |
|---|---|
| **Application** | WB, FC |
| **Primary Accession** | Q9Y6P5 |
| **Reactivity** | Human, Mouse, Rat |
| **Clonality** | Monoclonal |
| **Calculated MW** | 56557 |

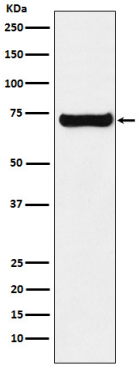
## Additional Information

| | |
|---|---|
| **Gene ID** | 27244 |
| **Other Names** | Sestrin-1, 1.11.1.-, p53-regulated protein PA26, SESN1 (HGNC:21595) |
| **Dilution** | WB~~1:1000 FC~~1:10~50 |
| **Storage Conditions** | -20℃ |

## 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.. |

## Images




Western blot analysis of SESN1 expression in K562 cell lysate.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.