

#### DENR / Density Regulated Antibody (aa148-198) Rabbit Polyclonal Antibody Catalog # ALS16373

### **Specification**

# DENR / Density Regulated Antibody (aa148-198) - Product Information

Application Primary Accession Reactivity

Host Clonality Calculated MW IHC <u>O43583</u> Human, Mouse, Rat, Chicken, Goat, Xenopus, Bovine Rabbit Polyclonal 22kDa KDa

### DENR / Density Regulated Antibody (aa148-198) - Additional Information

Gene ID 8562

**Other Names** Density-regulated protein, DRP, Protein DRP1, Smooth muscle cell-associated protein 3, SMAP-3, DENR, DRP1

**Target/Specificity** Region between residue 148 and 198 of human Density-Regulated Protein using the numbering given in entry NP\_003668.2 (GeneID 8562).

**Reconstitution & Storage** Store at 2-8°C for up to 1 year.

**Precautions** 

DENR / Density Regulated Antibody (aa148-198) is for research use only and not for use in diagnostic or therapeutic procedures.

### DENR / Density Regulated Antibody (aa148-198) - Protein Information

Name DENR

Synonyms DRP1

Function

Translation regulator forming a complex with MCTS1 to promote translation reinitiation. Translation reinitiation is the process where the small ribosomal subunit remains attached to the mRNA following termination of translation of a regulatory upstream ORF (uORF), and resume scanning on the same mRNA molecule to initiate translation of a downstream ORF, usually the main ORF (mORF). The MCTS1/DENR complex is pivotal to two linked mechanisms essential for translation reinitiation. Firstly, the dissociation of deacylated tRNAs from post- termination 40S ribosomal complexes during ribosome recycling. Secondly, the recruitment in an EIF2-independent manner of aminoacylated initiator tRNA to P site of 40S ribosomes for a new round of translation.



This regulatory mechanism governs the translation of more than 150 genes which translation reinitiation is MCTS1/DENR complex-dependent.

Cellular Location Cytoplasm.

**Tissue Location** 

Highly expressed in heart and skeletal muscle and moderately expressed in the brain, placenta, liver and pancreas. Weakly expressed in the lung and kidney.

Volume 50 μl

# DENR / Density Regulated Antibody (aa148-198) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

DENR / Density Regulated Antibody (aa148-198) - Images



Human Breast: Formalin-Fixed, Paraffin-Embedded (FFPE) DENR / Density Regulated Antibody (aa148-198) - Background

May be involved in the translation of target mRNAs by scanning and recognition of the initiation codon. Involved in translation initiation; promotes recruitmnet of aminoacetyled initiator tRNA to P site of 40S ribosomes. Can promote release of deacylated tRNA and mRNA from recycled 40S subunits following ABCE1-mediated dissociation of post-termination ribosomal complexes into subunits. Plays a role in the modulation of the translational profile of a subset of cancer-related mRNAs when recruited to the translational initiation complex by the oncogene MCTS1.

### DENR / Density Regulated Antibody (aa148-198) - References



Deyo J.E., et al.DNA Cell Biol. 17:437-447(1998). Nishimoto S., et al.Submitted (MAY-1998) to the EMBL/GenBank/DDBJ databases. Scherer S.E., et al.Nature 440:346-351(2006). Oh J.J., et al.Nucleic Acids Res. 27:4008-4017(1999). Reinert L.S., et al.Cancer Res. 66:8994-9001(2006).