

### RT34 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP10991a

## **Specification**

## RT34 Antibody (N-term) - Product Information

**Application** FC, WB, E **Primary Accession** P82930 Other Accession NP 076425.1 Human, Mouse Reactivity Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 25650 Antigen Region 4-32

## RT34 Antibody (N-term) - Additional Information

#### Gene ID 65993

### **Other Names**

28S ribosomal protein S34, mitochondrial, MRP-S34, S34mt, MRPS34

### Target/Specificity

This RT34 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 4-32 amino acids from the N-terminal region of human RT34.

# **Dilution**

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

E~~Use at an assay dependent concentration.

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### Storage

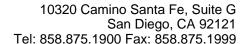
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

RT34 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

# RT34 Antibody (N-term) - Protein Information

Name MRPS34





**Function** Required for mitochondrial translation, plays a role in maintaining the stability of the small ribosomal subunit and the 12S rRNA that are required for mitoribosome formation.

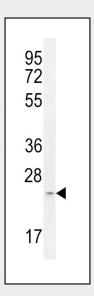
**Cellular Location** Mitochondrion.

## RT34 Antibody (N-term) - Protocols

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

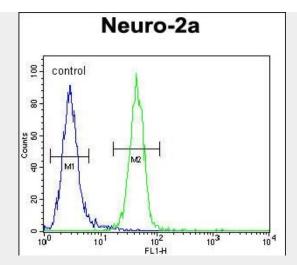
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## RT34 Antibody (N-term) - Images



RT34 Antibody (N-term) (Cat. #AP10991a) western blot analysis in mouse Neuro-2a cell line lysates (35ug/lane). This demonstrates the RT34 antibody detected the RT34 protein (arrow).





RT34 Antibody (N-term) (Cat. #AP10991a) flow cytometric analysis of Neuro-2a cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# RT34 Antibody (N-term) - Background

Mammalian mitochondrial ribosomal proteins are encoded by nuclear genes and help in protein synthesis within the mitochondrion. Mitochondrial ribosomes (mitoribosomes) consist of a small 28S subunit and a large 39S subunit. They have an estimated 75% protein to rRNA composition compared to prokaryotic ribosomes, where this ratio is reversed. Another difference between mammalian mitoribosomes and prokaryotic ribosomes is that the latter contain a 5S rRNA. Among different species, the proteins comprising the mitoribosome differ greatly in sequence, and sometimes in biochemical properties, which prevents easy recognition by sequence homology. This gene encodes a 28S subunit protein. Alternate splice variants of this gene have been described but their full-length nature has not been determined.

## RT34 Antibody (N-term) - References

Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007): Zhang, Z., et al. Genomics 81(5):468-480(2003)
Ogawa, F., et al. Biochem. Biophys. Res. Commun. 300(3):789-792(2003)
Cavdar Koc, E., et al. J. Biol. Chem. 276(22):19363-19374(2001)
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