

# RPS27 Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP22097a

#### **Product Information**

**Application** WB, FC, IHC-P, E

Primary Accession P42677

Other Accession Q2KHT7, Q6ZWU9, Q71TY3

**Reactivity** Human, Rat, Mouse **Predicted** Bovine, Mouse, Rat

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Clone Names RB55893
Calculated MW 9461

## **Additional Information**

**Gene ID** 6232

Other Names 40S ribosomal protein S27, Metallopan-stimulin 1, MPS-1, RPS27, MPS1

**Target/Specificity** This RPS27 antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 5-37 amino acids from human RPS27.

**Dilution** WB~~1:2000 FC~~1:25 IHC-P~~1:100~500 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** RPS27 Antibody (N-Term) is for research use only and not for use in

diagnostic or therapeutic procedures.

#### **Protein Information**

Name RPS27 ( <u>HGNC:10416</u>)

Synonyms MPS1

**Function** Component of the small ribosomal subunit (PubMed: <u>23636399</u>,

PubMed:<u>8706699</u>). The ribosome is a large ribonucleoprotein complex

responsible for the synthesis of proteins in the cell (PubMed:23636399). Required for proper rRNA processing and maturation of 18S rRNAs (PubMed:25424902). Part of the small subunit (SSU) processome, first precursor of the small eukaryotic ribosomal subunit. During the assembly of the SSU processome in the nucleolus, many ribosome biogenesis factors, an RNA chaperone and ribosomal proteins associate with the nascent pre-rRNA and work in concert to generate RNA folding, modifications, rearrangements and cleavage as well as targeted degradation of pre-ribosomal RNA by the RNA exosome (PubMed:34516797).

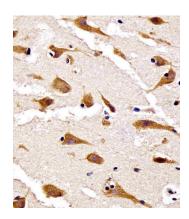
**Cellular Location** Cytoplasm. Nucleus, nucleolus

**Tissue Location** Expressed in a wide variety of actively proliferating cells and tumor tissues.

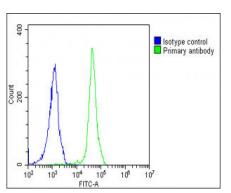
## References

Fernandez-Pol J.A., et al.J. Biol. Chem. 268:21198-21204(1993). Tsui S.K.W., et al.Biochem. Mol. Biol. Int. 40:611-616(1996). Yoshihama M., et al.Genome Res. 12:379-390(2002). Ota T., et al.Nat. Genet. 36:40-45(2004). Gregory S.G., et al.Nature 441:315-321(2006).

# **Images**

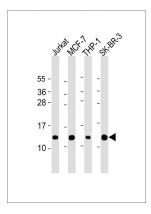


AP22097a staining RPS27 in human brain tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



Overlay histogram showing Jurkat cells stained with AP22097a(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22097a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OH191631) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

All lanes: Anti-RPS27 Antibody (N-Term) at 1:2000 dilution Lane 1: Jurkat whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: THP-1 whole cell lysate Lane 4: SK-BR-3 whole cell lysate Lysates/proteins at 20 µg per



lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 9 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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