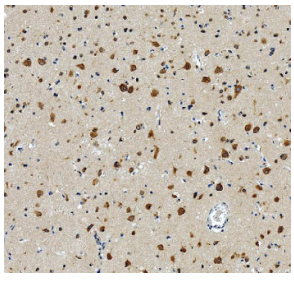
RPL19 Antibody / Ribosomal protein L19 (R32560)

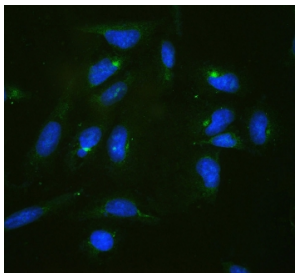
Catalog No.	Formulation	Size
R32560	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

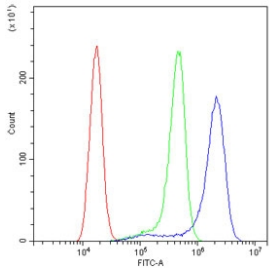
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA and 0.025% sodium azide
UniProt	P84098
Localization	Cytoplasmic, nuclear
Applications	Western Blot : 0.5-1ug/ml Immunofluorescence/Immunocytochemistry : 5ug/ml Flow Cytometry : 1-3ug/million cells Immunohistochemistry (FFPE) : 2-5ug/ml
Limitations	This RPL19 antibody is available for research use only.



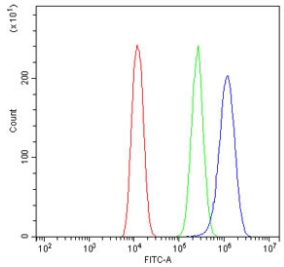
IHC staining of FFPE human brain tissue with RPL19 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



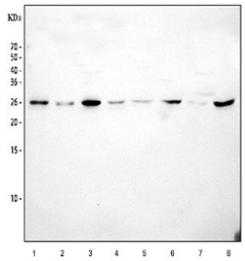
IF/ICC staining of FFPE human U-2 OS cells with RPL19 antibody (green) at 2ug/ml and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Flow cytometry testing of human A431 cells with RPL19 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= RPL19 antibody.



Flow cytometry testing of human U-2 OS cells with RPL19 antibody at 1ug/10^6 cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= RPL19 antibody.



Western blot testing of 1) human MCF7, 2) human A2780, 3) human 293T, 4) human Jurkat, 5) rat brain, 6) rat liver, 7) mouse brain and 8) mouse liver tissue lysate with RPL19 antibody at 0.5ug/ml. Expected molecular weight: 23-28 kDa.

Description

RPL19 antibody is a valuable tool for studying ribosome function, protein synthesis, and cell growth regulation. The encoded protein, ribosomal protein L19, is a structural component of the large 60S ribosomal subunit. RPL19 participates in ribosome assembly, stabilization of rRNA, and coordination of translational elongation. As part of the ribosomal machinery, it is required for efficient protein biosynthesis, which underpins cellular proliferation, differentiation, and survival.

Ribosomal protein L19 belongs to the L19E family of ribosomal proteins, which are highly conserved across eukaryotic species. Localized in the cytoplasm, RPL19 integrates into the 60S ribosome and associates with other ribosomal proteins to maintain structural integrity. Its position within the ribosome suggests a role in stabilizing intersubunit interactions and ensuring fidelity of translation. Through these activities, RPL19 contributes to maintaining the efficiency and accuracy of protein synthesis across tissues.

Beyond its role in the ribosome, RPL19 has been investigated for potential extra-ribosomal functions. Overexpression of RPL19 has been reported in certain cancers, including prostate and breast cancer, where it may influence proliferation and tumor progression. Elevated expression of ribosomal proteins such as RPL19 has been studied as a potential biomarker of malignancy, linking ribosome biogenesis to oncogenic pathways. Research continues to explore whether

altered RPL19 expression contributes directly to tumor biology or reflects broader dysregulation of protein synthesis.

At the molecular level, RPL19 interacts closely with rRNA within the large subunit to stabilize ribosome architecture. It also associates with neighboring ribosomal proteins, supporting assembly of the functional 80S ribosome during translation initiation. Structural studies highlight its contribution to maintaining translational fidelity, underscoring its importance in fundamental cell biology.

The RPL19 antibody is widely used in western blotting, immunohistochemistry, immunofluorescence, and flow cytometry to detect protein expression and localization. These applications are essential for studies of ribosome assembly, cancer biology, and translational control. For researchers focused on ribosome function, protein synthesis, or oncogenic processes, the RPL19 antibody provides a robust and reliable detection reagent. NSJ Bioreagents supplies validated antibodies that ensure reproducibility and precision in advanced molecular studies.

Application Notes

Differences in protocols and secondary/substrate sensitivity may require the RPL19 antibody to be titrated for optimal performance.

Immunogen

Amino acids 132-170 (FKNKRILMEHIHKLKADKARKKLLADQAEARRSKTKEAR) from the human protein were used as the immunogen for the RPL19 antibody.

Storage

After reconstitution, the RPL19 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.