

PRPK / TP53RK Antibody (clone 4B9-1H3)

Mouse Monoclonal Antibody Catalog # ALS13503

Specification

PRPK / TP53RK Antibody (clone 4B9-1H3) - Product Information

Application IHC
Primary Accession Q96S44
Reactivity Human
Host Mouse
Clonality Monoclonal
Calculated MW 28kDa KDa

PRPK / TP53RK Antibody (clone 4B9-1H3) - Additional Information

Gene ID 112858

Other Names

TP53-regulating kinase, 2.7.11.1, Atypical serine/threonine protein kinase TP53RK, EKC/KEOPS complex subunit TP53RK, 3.6.-.-, Nori-2, p53-related protein kinase, TP53RK, C20orf64, PRPK

Reconstitution & Storage

Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions

PRPK / TP53RK Antibody (clone 4B9-1H3) is for research use only and not for use in diagnostic or therapeutic procedures.

PRPK / TP53RK Antibody (clone 4B9-1H3) - Protein Information

Name TP53RK (<u>HGNC:16197</u>)

Function

Component of the EKC/KEOPS complex that is required for the formation of a threonylcarbamoyl group on adenosine at position 37 (t(6)A37) in tRNAs that read codons beginning with adenine (PubMed:22912744, PubMed:27903914). The complex is probably involved in the transfer of the threonylcarbamoyl moiety of threonylcarbamoyl-AMP (TC-AMP) to the N6 group of A37 (PubMed:22912744, PubMed:27903914). TP53RK has ATPase activity in the context of the EKC/KEOPS complex and likely plays a supporting role to the catalytic subunit OSGEP (By similarity). Atypical protein kinase that phosphorylates 'Ser-15' of p53/TP53 protein and may therefore participate in its activation (PubMed:11546806).

Cellular Location

Cytoplasm. Nucleus



Tissue Location

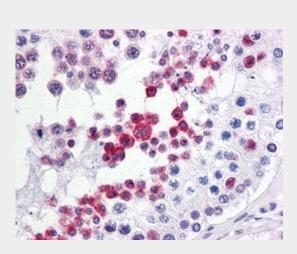
Highly expressed in testis. Weakly expressed in heart kidney and spleen.

PRPK / TP53RK Antibody (clone 4B9-1H3) - Protocols

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

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

PRPK / TP53RK Antibody (clone 4B9-1H3) - Images



Anti-TP53RK antibody IHC of human testis.

PRPK / TP53RK Antibody (clone 4B9-1H3) - Background

Component of the EKC/KEOPS complex that is required for the formation of a threonylcarbamoyl group on adenosine at position 37 (t(6)A37) in tRNAs that read codons beginning with adenine. The complex is probably involved in the transfer of the threonylcarbamoyl moiety of threonylcarbamoyl-AMP (TC-AMP) to the N6 group of A37. TP53RK has ATPase activity in the context of the EKC/KEOPS complex and likely plays a supporting role to the catalytic subunit OSGEP (By similarity). Atypical protein kinase that phosphorylates 'Ser-15' of p53/TP53 protein and may therefore participate in its activation.

PRPK / TP53RK Antibody (clone 4B9-1H3) - References

Abe Y.,et al.J. Biol. Chem. 276:44003-44011(2001). Abe Y.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases. Ota T.,et al.Nat. Genet. 36:40-45(2004).

Deloukas P., et al. Nature 414:865-871(2001).

Mural R.J., et al. Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.