10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# Nudt16 antibody - N-terminal region
**Rabbit Polyclonal Antibody**
**Catalog # AI13485**

## Specification

### Nudt16 antibody - N-terminal region - Product Information

| | |
|---|---|
| Application | **WB** |
| Primary Accession | Q6P3D0 |
| Other Accession | NM_029385, NP_083661 |
| Reactivity | **Human, Mouse, Rat, Rabbit, Sheep, Horse, Bovine, Guinea Pig, Dog** |
| Predicted | **Human, Rat, Pig, Horse, Bovine, Guinea Pig, Dog** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Calculated MW | **23kDa KDa** |

### Nudt16 antibody - N-terminal region - Additional Information

**Gene ID** 75686

| | |
|---|---|
| Alias Symbol | **2310041H06Rik, 2810047L04Rik, 2900006H04Rik, AI851783** |

**Other Names**
U8 snoRNA-decapping enzyme, 3.6.1.62, IDP phosphatase, IDPase, 3.6.1.-, Inosine diphosphate phosphatase, Nucleoside diphosphate-linked moiety X motif 16, Nudix motif 16, m7GpppN-mRNA hydrolase, Nudt16

**Format**
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

**Reconstitution & Storage**
Add 50 ul of distilled water. Final anti-Nudt16 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

**Precautions**
Nudt16 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

### Nudt16 antibody - N-terminal region - Protein Information

**Name** Nudt16

**Function**
RNA-binding and decapping enzyme that catalyzes the cleavage of the cap structure of snoRNAs and mRNAs in a metal-dependent manner. Part of the U8 snoRNP complex that is required for the accumulation of mature 5.8S and 28S rRNA. Has diphosphatase activity and removes m7G and/or m227G caps from U8 snoRNA and leaves a 5'monophosphate on the RNA. Catalyzes also the

cleavage of the cap structure on mRNAs. Does not hydrolyze cap analog structures like 7-methylguanosine nucleoside triphosphate (m7GpppG). Also hydrolysis m7G- and m227G U3-capped RNAs but with less efficiencies. Has broad substrate specificity with manganese or cobalt as cofactor and can act on various RNA species. Binds to the U8 snoRNA; metal is not required for RNA-binding. May play a role in the regulation of snoRNAs and mRNAs degradation (By similarity). Acts also as a phosphatase; hydrolyzes the non-canonical purine nucleotides inosine diphosphate (IDP) and deoxyinosine diphosphate (dITP) as well as guanosine diphosphate (GDP), deoxyguanosine diphosphate (dGDP), xanthine diphosphate (XDP), inosine triphosphate (ITP) and deoxyinosine triphosphate (ITP) to their respective monophosphate derivatives and does not distinguish between the deoxy- and ribose forms. The order of activity with different substrates is IDP > dIDP >> GDP = dGDP > XDP = ITP = dITP. Binds strongly to GTP, ITP and XTP. Participates in the hydrolysis of dIDP/IDP and probably excludes non-canonical purines from RNA and DNA precursor pools, thus preventing their incorporation into RNA and DNA and avoiding chromosomal lesions. Exhibits decapping activity towards NAD-capped RNAs and FAD-capped RNAs (By similarity). Exhibits decapping activity towards dpCoA-capped RNAs in vitro (PubMed:<a href="http://www.uniprot.org/citations/32432673" target="_blank">32432673</a>).

**Cellular Location**
Nucleus {ECO:0000250|UniProtKB:Q96DE0}. Nucleus, nucleolus {ECO:0000250|UniProtKB:Q6TEC1}. Nucleus, nucleoplasm {ECO:0000250|UniProtKB:Q6TEC1}. Cytoplasm {ECO:0000250|UniProtKB:Q96DE0}. Note=Localized predominantly in the cytoplasm. Localized in nucleolus, and in a minor proportion in distinct foci in the nucleoplasm. {ECO:0000250|UniProtKB:Q6TEC1, ECO:0000250|UniProtKB:Q96DE0}

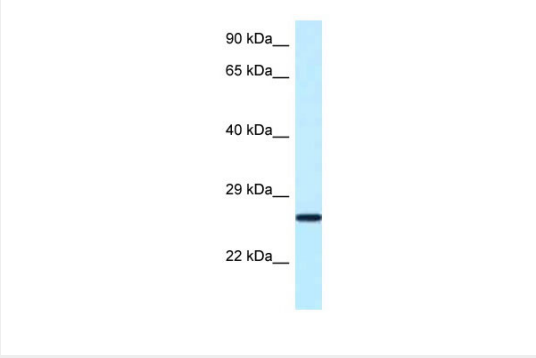
**Tissue Location**
Expressed in brain, testis, spleen, lung, heart, liver, kidney and muscle (at protein level)

## Nudt16 antibody - N-terminal region - 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
- Cell Culture

## Nudt16 antibody - N-terminal region - Images




WB Suggested Anti-Nudt16 Antibody Titration: 1.0 µg/ml

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Positive Control: Mouse Small Intestine

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Carninci P.,et al.Science 309:1559-1563(2005).
Song M.G.,et al.Mol. Cell 40:423-432(2010).
Abolhassani N.,et al.Nucleic Acids Res. 38:2891-2903(2010).
Iyama T.,et al.Nucleic Acids Res. 38:4834-4843(2010).