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C21ORF18 antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI10689

Specification

C21ORF18 antibody - C-terminal region - Product Information

Application	**WB**
Primary Accession	Q9NVD3
Other Accession	NM_017438, NP_059134
Reactivity	**Human, Mouse, Rat, Rabbit, Horse, Bovine, Dog**
Predicted	**Human, Mouse, Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**50kDa KDa**

C21ORF18 antibody - C-terminal region - Additional Information

Gene ID 54093

Alias Symbol	**C21orf18, C21orf27**

Other Names
SET domain-containing protein 4, 2.1.1.-, SETD4, C21orf18, C21orf27

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-C21ORF18 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
C21ORF18 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

C21ORF18 antibody - C-terminal region - Protein Information

Name SETD4 {ECO:0000303|PubMed:24738023, ECO:0000312|HGNC:HGNC:1258}

Function
Protein-lysine N-methyltransferase that methylates both histones and non-histone proteins (PubMed:31308046, PubMed:35545041, PubMed:37926288). Via its catalytic activity, regulates many processes, including cell proliferation, cell differentiation, inflammatory response and apoptosis. Regulates the inflammatory response by mediating mono- and dimethylation of 'Lys-4' of histone H3 (H3K4me1 and H3K4me2, respectively), leading to activate the transcription of pro- inflammatory cytokines IL6 and TNF-alpha (By similarity).

Through the catalysis of TBK1 monomethylation, may regulate virus-induced interferon signaling. TBK1 monomethylation enhances its interaction with MAVS, STING and IRF3, hence promoting antiviral interferon signaling (PubMed:37926288). Also involved in the regulation of stem cell quiescence by catalyzing the trimethylation of 'Lys-20' of histone H4 (H4K20me3), thereby promoting heterochromatin formation (PubMed:31308046). In the brain, epigenetically controls quiescence of neural stem cells for sustaining a protected neural stem cell population and maintaining a stem cell reservoir for neurogenesis (By similarity). Involved in proliferation, migration, paracrine and myogenic differentiation of bone marrow mesenchymal stem cells (BMSCs) (By similarity). Through the catalysis of XRCC5/Ku70 trimethylation, regulates BAX-mediated apoptosis. SETD4-catalyzed XRCC5 methylation results in XRCC5 translocation to the cytoplasm, where it interacts with BAX, sequestering it from the mitochondria, hence preventing BAX- mediated apoptosis (PubMed:35545041).

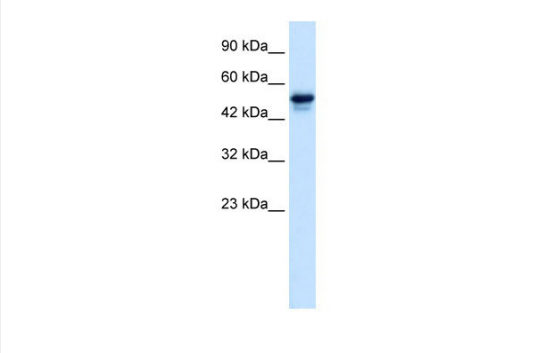
Cellular Location
Cytoplasm, cytosol. Nucleus

C21ORF18 antibody - C-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

C21ORF18 antibody - C-terminal region - Images



WB Suggested Anti-C21ORF18 Antibody Titration: 0.2-1 µg/ml
ELISA Titer: 1:12500
Positive Control: HepG2 cell lysate

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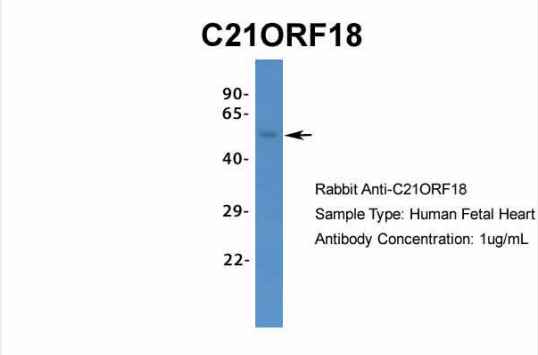
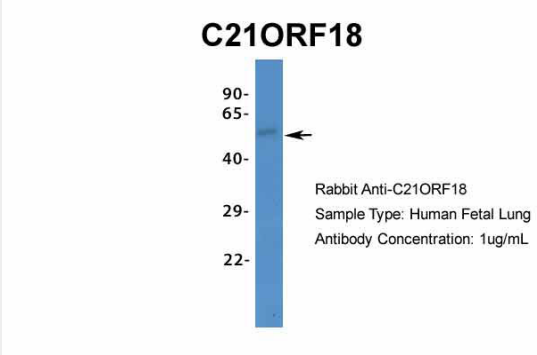
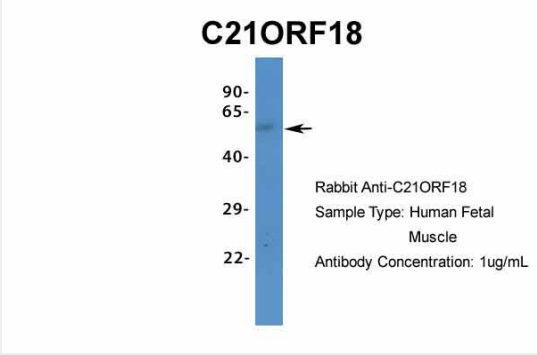


Host: Rabbit
Target Name: C21ORF18
Sample Tissue: Human Fetal Heart
Antibody Dilution: 1.0µg/ml



Host: Rabbit
Target Name: C21ORF18
Sample Tissue: Human Fetal Lung
Antibody Dilution: 1.0µg/ml



Host: Rabbit
Target Name: C21ORF18
Sample Tissue: Human Fetal Muscle
Antibody Dilution: 1.0µg/ml

C21ORF18 antibody - C-terminal region - References

Reymond,A., et al., (2001) Genomics 78 (1-2), 46-54Reconstitution and Storage:For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.