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Goat Anti-C14orf169 / NO66 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1170a

Specification

Goat Anti-C14orf169 / NO66 Antibody - Product Information

Application	**WB**
Primary Accession	Q9H6W3
Other Accession	NP_078920, 79697, 71952 (mouse)
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**71086**

Goat Anti-C14orf169 / NO66 Antibody - Additional Information

Gene ID 79697

Other Names
Bifunctional lysine-specific demethylase and histidyl-hydroxylase NO66, 1.14.11.-, 1.14.11.27, 60S ribosomal protein L8 histidine hydroxylase, Histone lysine demethylase NO66, Myc-associated protein with JmjC domain, Nucleolar protein 66, hsNO66, Ribosomal oxygenase NO66, ROX, NO66, C14orf169, MAPJD

Format
0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Goat Anti-C14orf169 / NO66 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-C14orf169 / NO66 Antibody - Protein Information

Name RIOX1 {ECO:0000303|PubMed:35210392, ECO:0000312|HGNC:HGNC:20968}

Function
Oxygenase that can act as both a histone lysine demethylase and a ribosomal histidine hydroxylase (PubMed:23103944). Specifically demethylates 'Lys-4' (H3K4me) and 'Lys-36'

(H3K36me) of histone H3, thereby playing a central role in histone code (By similarity). Preferentially demethylates trimethylated H3 'Lys-4' (H3K4me3) and monomethylated H3 'Lys-4' (H3K4me1) residues, while it has weaker activity for dimethylated H3 'Lys-36' (H3K36me2) (By similarity). Acts as a regulator of osteoblast differentiation via its interaction with SP7/OSX by demethylating H3K4me and H3K36me, thereby inhibiting SP7/OSX-mediated promoter activation (By similarity). Also catalyzes demethylation of non-histone proteins, such as CGAS: demethylation of monomethylated CGAS promotes interaction between CGAS and PARP1, followed by PARP1 inactivation (By similarity). Also catalyzes the hydroxylation of 60S ribosomal protein L8 on 'His-216', thereby playing a role in ribosome biogenesis (PubMed:23103944). Participates in MYC- induced transcriptional activation (PubMed:17308053).

Cellular Location
Nucleus, nucleolus. Nucleus, nucleoplasm. Note=Granular part of nucleoli (PubMed:14742713). Nucleoplasm, nucleoplasmic foci, some of them associated with nucleoli (PubMed:14742713)

Tissue Location
Widely expressed. Overexpressed in lung carcinomas.

Goat Anti-C14orf169 / NO66 Antibody - 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

Goat Anti-C14orf169 / NO66 Antibody - Images

AF1170a (0.3 µg/ml) staining of A431 cell lysate (35 µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

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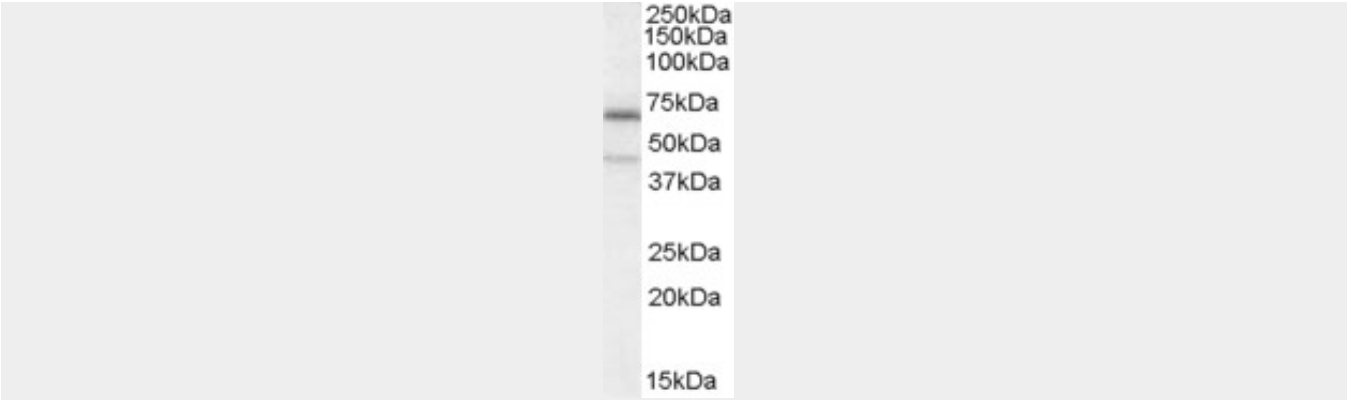

EB07620 (0.3µg/ml) staining of A431 cell lysate (35µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

Goat Anti-C14orf169 / NO66 Antibody - References

Regulation of the osteoblast-specific transcription factor Osterix by NO66, a Jumonji family histone demethylase. Sinha KM, et al. EMBO J, 2010 Jan 6. PMID 19927124.
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Identification of Myc-associated protein with JmjC domain as a novel therapeutic target oncogene for lung cancer. Suzuki C, et al. Mol Cancer Ther, 2007 Feb. PMID 17308053.
The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.
NO66, a highly conserved dual location protein in the nucleolus and in a special type of synchronously replicating chromatin. Eilbracht J, et al. Mol Biol Cell, 2004 Apr. PMID 14742713.