

**Goat Anti-C14orf169 / NO66 Antibody**  
**Peptide-affinity purified goat antibody**  
**Catalog # AF1170a****Specification****Goat Anti-C14orf169 / NO66 Antibody - Product Information**

Application	WB, Pep-ELISA
Primary Accession	<a href="#">O9H6W3</a>
Other Accession	<a href="#">NP_078920</a> , <a href="#">79697</a> , <a href="#">71952 (mouse)</a>
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

**Dilution**

WB~~1:1000  
Pep-ELISA~~N/A

**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:<a href="http://www.uniprot.org/citations/23103944" target="\_blank">23103944</a>). 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:<a href="http://www.uniprot.org/citations/23103944" target="\_blank">23103944</a>). Participates in MYC- induced transcriptional activation (PubMed:<a href="http://www.uniprot.org/citations/17308053" target="\_blank">17308053</a>).

## 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 Cytometry](#)
- [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.



EB07620 (0.3 $\mu$ g/ml) staining of A431 cell lysate (35 $\mu$ g 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.

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.

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.