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Goat Anti-MEL18 / PCGF2 Antibody
Peptide-affinity purified goat antibody
Catalog # AF1665a

Specification

Goat Anti-MEL18 / PCGF2 Antibody - Product Information

Application	**WB, E**
Primary Accession	P35227
Other Accession	NP_009075, 7703
Reactivity	**Human**
Predicted	**Dog**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**100ug/200ul**
Isotype	**IgG**
Calculated MW	**37788**

Goat Anti-MEL18 / PCGF2 Antibody - Additional Information

Gene ID 7703

Other Names
Polycomb group RING finger protein 2, DNA-binding protein Mel-18, RING finger protein 110, Zinc finger protein 144, PCGF2, MEL18, RNF110, ZNF144

Dilution
WB~~1:1000
E~~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-MEL18 / PCGF2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-MEL18 / PCGF2 Antibody - Protein Information

Name PCGF2

Synonyms MEL18, RNF110, ZNF144

Function
Transcriptional repressor. Binds specifically to the DNA sequence 5'-GACTNGACT-3'. Has tumor suppressor activity. May play a role in control of cell proliferation and/or neural cell development. Regulates proliferation of early T progenitor cells by maintaining expression of HES1. Also plays a role in antero-posterior specification of the axial skeleton and negative regulation of the self-renewal activity of hematopoietic stem cells (By similarity). Component of a Polycomb group (PcG) multiprotein PRC1-like complex, a complex class required to maintain the transcriptionally repressive state of many genes, including Hox genes, throughout development. PcG PRC1 complex acts via chromatin remodeling and modification of histones; it mediates monoubiquitination of histone H2A 'Lys-119', rendering chromatin heritably changed in its expressibility (PubMed:26151332). Within the PRC1-like complex, regulates RNF2 ubiquitin ligase activity (PubMed:26151332).

Cellular Location
Nucleus.

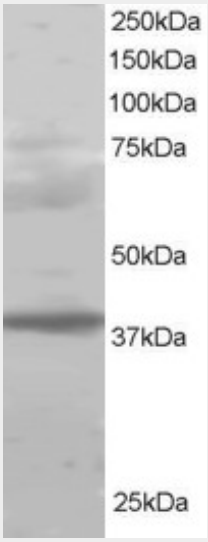
Tissue Location
Detected in all tissues examined with high expression found in placenta lung and kidney and low expression, in liver, pancreas and skeletal muscle

Goat Anti-MEL18 / PCGF2 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-MEL18 / PCGF2 Antibody - Images



AF1665a staining (1 µg/ml) of Human Lung lysate (RIPA buffer, 30 µg total protein per lane).

Primary incubated for 1 hour. Detected by western blot using chemiluminescence.

Goat Anti-MEL18 / PCGF2 Antibody - Background

The protein encoded by this gene contains a RING finger motif and is similar to the polycomb group (PcG) gene products. PcG gene products form complexes via protein-protein interaction and maintain the transcription repression of genes involved in embryogenesis, cell cycles, and tumorigenesis. This protein was shown to act as a negative regulator of transcription and has tumor suppressor activity. The expression of this gene was detected in various tumor cells, but is limited in neural organs in normal tissues. Knockout studies in mice suggested that this protein may negatively regulate the expression of different cytokines, chemokines, and chemokine receptors, and thus plays an important role in lymphocyte differentiation and migration, as well as in immune responses.

Goat Anti-MEL18 / PCGF2 Antibody - References

BMI1 and Mel-18 oppositely regulate carcinogenesis and progression of gastric cancer. Zhang XW, et al. Mol Cancer, 2010 Feb 21. PMID 20170541.
The novel tumor-suppressor Mel-18 in prostate cancer: its functional polymorphism, expression and clinical significance. Wang W, et al. Int J Cancer, 2009 Dec 15. PMID 19585577.
Mel-18 interacts with RanGAP1 and inhibits its sumoylation. Zhang J, et al. Biochem Biophys Res Commun, 2008 Oct 17. PMID 18706886.
A phosphorylated form of Mel-18 targets the Ring1B histone H2A ubiquitin ligase to chromatin. Elderkin S, et al. Mol Cell, 2007 Oct 12. PMID 17936708.
Violating the splicing rules: TG dinucleotides function as alternative 3' splice sites in U2-dependent introns. Szafranski K, et al. Genome Biol, 2007. PMID 17672918.