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Mel18 Rabbit pAb

Catalog # AP98193

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	P35227
Other Accession	P35227
Predicted	Rat, Pig, Chimpanzee, Human, Mouse, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	37788
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Mel18
Epitope Specificity	281-344/344
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 RING-type zinc finger.
SUBUNIT	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. Component of the Polycomb group (PcG) multiprotein PRC1 complex, a complex 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.
Post-translational modifications	Phosphorylated. Homodimer formation is regulated by phosphorylation state with unphosphorylated protein forming homodimers.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	7703
Other Names	MEL-18; RNF110; TPFS; ZNF144; Mel18; Zfp144; PCGF2_HUMAN; PCGF2; DNA-binding protein Mel-18; RING finger protein 110; Zinc finger protein 144; PCGF2_MOUSE; Melanoma nuclear protein 18; Zinc finger protein 144 (Zfp-144); polycomb group ring finger 2
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC/IF=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.