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PATZ1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP58345

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	Q9HBE1
Reactivity	Rat, Pig, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	74060
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PATZ1
Epitope Specificity	351-450/687
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Nucleus.
SIMILARITY	Belongs to the krueppel C2H2-type zinc-finger protein family.Contains 1 A.T hook DNA-binding domain.Contains 1 BTB (POZ) domain.Contains 7 C2H2-type zinc fingers.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	PATZ1 contains an A-T hook DNA binding motif which usually binds to other DNA binding structures to play an important role in chromatin modeling and transcription regulation. Its Poz domain is thought to function as a site for protein-protein interaction and is required for transcriptional repression, and the zinc fingers comprise the DNA binding domain. Since the encoded protein has typical features of a transcription factor, it is postulated to be a repressor of gene expression. In small round cell sarcoma, this gene is fused to EWS by a small inversion of 22q, then the hybrid is thought to be translocated (t(1;22)(p36.1;q12).The protein encoded by this gene contains an A-T hook DNA binding motif which usually binds to other DNA binding structures to play an important role in chromatin modeling and transcription regulation. Its Poz domain is thought to function as a site for protein-protein interaction and is required for transcriptional repression, and the zinc fingers comprise the DNA binding domain. Since the encoded protein has typical features of a transcription factor, it is postulated to be a repressor of gene expression. In small round cell sarcoma, this gene is fused to EWS by a small inversion of 22q, then the hybrid is thought to be translocated (t(1;22)(p36.1;q12). The rearrangement of chromosome 22 involves intron 8 of EWS and exon 1 of this gene creating a chimeric sequence containing the transactivation domain of EWS fused to zinc finger domain of this protein. This is a distinct example of an intra chromosomal rearrangement of chromosome 22. Four alternatively spliced transcript variants are described for this gene.

Additional Information

Gene ID	23598
Other Names	POZ-, AT hook-, and zinc finger-containing protein 1, BTB/POZ domain zinc finger transcription factor, Protein kinase A RI subunit alpha-associated protein, Zinc finger and BTB domain-containing protein 19, Zinc finger protein 278, Zinc finger sarcoma gene protein, PATZ1, PATZ, RIAZ, ZBTB19, ZNF278, ZSG
Target/Specificity	Ubiquitous.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
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	PATZ1
Synonyms	PATZ, RIAZ, ZBTB19, ZNF278, ZSG
Function	Transcriptional regulator that plays a role in many biological processes such as embryogenesis, senescence, T-cell development or neurogenesis (PubMed:10713105, PubMed:25755280, PubMed:31875552). Interacts with the TP53 protein to control genes that are important in proliferation and in the DNA-damage response. Mechanistically, the interaction inhibits the DNA binding and transcriptional activity of TP53/p53 (PubMed:25755280). Part of the transcriptional network modulating regulatory T-cell development and controls the generation of the regulatory T-cell pool under homeostatic conditions (PubMed:31875552).
Cellular Location	Nucleus.
Tissue Location	Ubiquitous.