

PATZ1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58345

Specification

PATZ1 Polyclonal Antibody - Product Information

| Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen Epitope Specificity Isotype Purity affinity purified by Protein A | WB, IHC-P, IHC-F, IF, E <u>Q9HBE1</u> Rat, Pig, Dog, Bovine Rabbit Polyclonal 74 KDa Liquid KLH conjugated synthetic peptide derived from human PATZ1 351-450/687 IgG |
|--|---|
| Buffer | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. |
| SUBCELLULAR LOCATION SIMILARITY | Nucleus. 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.



PATZ1 Polyclonal Antibody - 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~~1:1000<br \>IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>E~~N/A

Format 0.01M TBS(pH7.4), 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.

PATZ1 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/25755280"")

target="_blank">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.



PATZ1 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

PATZ1 Polyclonal Antibody - Images