

ASZ1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP59221

Product Information

Application WB, IHC-P, IHC-F, IF, E

Primary Accession
Reactivity
Rat
Host
Clonality
Polyclonal
Calculated MW
Physical State

Q8WWH4
Rat
Rabbit
Polyclonal
Liquid

Immunogen KLH conjugated synthetic peptide derived from human ASZ1

Epitope Specificity 151-250/475

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 Cytoplasm (By similarity). Note=Component of the meiotic nuage, also named P granule, a germ-cell-specific organelle required to repress transposon

during meiosis. Specifically localizes to pi-bodies, a subset of the nuage which

contains primary piRNAs (By similarity).

SIMILARITY Contains 6 ANK repeats. Contains 1 SAM (sterile alpha motif) domain. **SUBUNIT** Interacts with DDX4, PIWIL1, RANBP9 and TDRD1 (By similarity).

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions ASZ1 (ankyrin repeat, SAM and basic leucine zipper domain-containing

protein 1), also known as ANKL1, ALP1 (Ankyrin-like protein 1), GASZ (germ cell-specific ankyrin, SAM and basic leucine zipper domain-containing protein) or Orf3, is a 475 amino acid protein that is suggested to function as a signal transducer during germ cell maturation. Localized to the cytoplasm of pachytene spermatocytes, early spermatids and oocytes, ASZ1 is primarily found in adult testis and ovary where it mediates protein-protein interactions. ASZ1 contains six ANK repeats, one SAM (sterile alpha motif) domain and is encoded by a gene located on human chromosome 7q31, a region that may have an important role in the development certain types of human cancer.

Additional Information

Gene ID 136991

Other Names Ankyrin repeat, SAM and basic leucine zipper domain-containing protein 1,

Ankyrin-like protein 1, Germ cell-specific ankyrin, SAM and basic leucine

zipper domain-containing protein, ASZ1 (HGNC:1350)

Target/Specificity Expressed exclusively in the testis and ovary and at higher levels in the adult

testis compared with the adult ovary.

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:50-200,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 ASZ1 (<u>HGNC:1350</u>)

Function Plays a central role during spermatogenesis by repressing transposable

elements and preventing their mobilization, which is essential for the germline integrity. Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and governs the methylation and subsequent repression of transposons. Its association with pi-bodies suggests a participation in the primary piRNAs metabolic process. Required prior to the pachytene stage to facilitate the production of multiple types of piRNAs, including those associated with repeats involved in the regulation of retrotransposons. May act by mediating protein-protein interactions during

germ cell maturation (By similarity).

Cellular Location Cytoplasm. Note=Component of the meiotic nuage, also named P granule, a

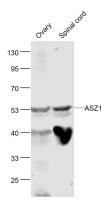
germ-cell-specific organelle required to repress transposon activity during meiosis. Specifically localizes to pi-bodies, a subset of the nuage which

contains primary piRNAs (By similarity).

Tissue Location Expressed exclusively in the testis and ovary and at higher levels in the adult

testis compared with the adult ovary

Images



Sample:

Ovary(Mouse) Lysate at 40 ug Spinal cord(Mouse) Lysate at 40 ug

Primary: Anti-ASZ1 (AP59221) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at

1/20000 dilution

Predicted band size: 53 kD Observed band size: 53 kD

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