

ASZ1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP59221

Specification

ASZ1 Polyclonal Antibody - Product Information

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

Primary Accession
Reactivity
Rat
Host
Clonality
Calculated MW
Rat
Rabbit
Polyclonal
S3 KDa

Physical State
Liquid
Immunogen
KLH conjugated synthetic peptide derived

laG

from human ASZ1

Epitope Specificity 151-250/475

Isotype Purity

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

affinity purified by Protein A

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.

ASZ1 Polyclonal Antibody - 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~~1:1000<br \><span class
="dilution_IHC-P">IHC-P~~N/A<br \><span class
="dilution_IHC-F">IHC-F~~N/A<br \><span class
="dilution_IF">IF~~1:50~200<br \>E~~N/A

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.

ASZ1 Polyclonal Antibody - Protein Information

Name ASZ1 (HGNC:1350)

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).

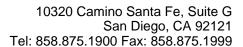
Tissue Location

Expressed exclusively in the testis and ovary and at higher levels in the adult testis compared with the adult ovary

ASZ1 Polyclonal Antibody - Protocols

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

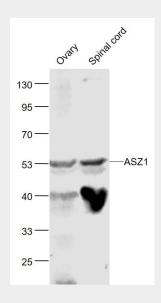
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence





- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

ASZ1 Polyclonal Antibody - Images



Sample:

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

Primary: Anti-ASZ1 (bs-9325R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

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