

MAEL/CT128 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP57179

Specification

MAEL/CT128 Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E Primary Accession Q96IY0

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 49 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human MAEL/CT128

Epitope Specificity 201-300/434

Isotype
Purity
affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm. Nucleus. Component of the

meiotic nuage, also named P granule, a germ-cell-specific organelle required to repress transposon during meiosis. Specifically localizes to piP-bodies, a subset of the nuage which contains

secondary piRNAs.

SIMILARITY Belongs to the maelstrom family. Contains

1 HMG box DNA-binding domain.

Important Note

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

therapeutic or diagnostic applications.

Background Descriptions

Mael is a 434 amino acid protein that localizes to both the nucleus and the cytoplasm and contains one HMG box DNA-binding domain. Expressed specifically in testicular tissue, Mael interacts with Ini1, mSin3B and VASA and plays an essential role in spermatogenesis, specifically by repressing and, ultimately, preventing the mobilization of transposable elements (a process that is crucial for germline integrity). Multiple isoforms of Mael exist due to alternative splicing events. The gene encoding Mael maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

MAEL/CT128 Polyclonal Antibody - Additional Information



Gene ID 84944

Other Names

Protein maelstrom homolog, MAEL

Target/Specificity

Testis-specific. Expressed in various cancer cell lines, probably due to demethylation of its promoter.

Dilution

```
<span class ="dilution_WB">WB~~1:1000</span><br \><span class
="dilution_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution_IF">IF~~1:50~200</span><br \><span class ="dilution_ICC">ICC~~N/A</span><br \><span class ="dilution_ICC">ICC~~N/A</span><br \><span class ="dilution_ICC">ICC~~N/A</span>
```

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.

MAEL/CT128 Polyclonal Antibody - Protein Information

Name MAEL

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 piP-bodies suggests a participation in the secondary piRNAs metabolic process. Required for the localization of germ-cell factors to the meiotic nuage (By similarity).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q8BVN9}. Nucleus {ECO:0000250|UniProtKB:Q8BVN9}. 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 piP-bodies, a subset of the nuage which contains secondary piRNAs (By similarity). {ECO:0000250|UniProtKB:Q8BVN9}

Tissue Location

Testis-specific. Expressed in various cancer cell lines, probably due to demethylation of its promoter {ECO:0000269|PubMed:19693694, ECO:0000269|Ref.1}

MAEL/CT128 Polyclonal Antibody - Protocols

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

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





• Flow Cytomety
• Cell Culture

MAEL/CT128 Polyclonal Antibody - Images