

RAI17 Antibody (C-term) Blocking Peptide Synthetic peptide

Catalog # BP6236a

Specification

RAI17 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession

<u>Q9ULJ6</u>

RAI17 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 57178

Other Names

Zinc finger MIZ domain-containing protein 1, PIAS-like protein Zimp10, Retinoic acid-induced protein 17, ZMIZ1, KIAA1224, RAI17, ZIMP10

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP6236a was selected from the C-term region of human RAI17 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RAI17 Antibody (C-term) Blocking Peptide - Protein Information

Name ZMIZ1 (<u>HGNC:16493</u>)

Synonyms KIAA1224, RAI17, ZIMP10

Function

Acts as a transcriptional coactivator. Increases ligand- dependent transcriptional activity of AR and promotes AR sumoylation. The stimulation of AR activity is dependent upon sumoylation (PubMed:14609956, PubMed:26522984). Also functions as a transcriptional coactivator in the TGF-beta signaling pathway by increasing the activity of the SMAD3/SMAD4 transcriptional complex (PubMed:16777850). Involved in transcriptional activation of a subset of NOTCH1 target genes including MYC. Involved in thymocyte and T cell development (By similarity). Involved in the regulation of postmitotic



positioning of pyramidal neurons in the developing cerebral cortex (PubMed:30639322).

Cellular Location

Nucleus, nucleoplasm. Cytoplasm. Nucleus Note=Enriched at replication foci throughout S phase

Tissue Location

Expressed most abundantly in ovary and, at lower levels, in prostate, spleen and testis. Weak expression, if any, in thymus, small intestine, colon and peripheral blood leukocytes

RAI17 Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

RAI17 Antibody (C-term) Blocking Peptide - Images

RAI17 Antibody (C-term) Blocking Peptide - Background

Retinoic acid plays a critical role in development, cellular growth, and differentiation and induces the expression of a variety of genes. RAI17 expression is induced by retinoic acid and is predominantly expressed in heart, brain and ovaries. Within brain, highest expression is in amygdala. The deduced 1,067-amino acid protein contains an MSX-interacting zinc finger (MIZ) domain, a nuclear localization signal sequence, and 2 proline-rich regions. A strong intrinsic transactivation domain is identified in the C-terminal proline-rich region. RAI17 expression is detected in various cancer cell lines. RAI17 colocalizes with endogenous androgen receptor (AR) in the nuclei of prostate epithelial cells from human tissue samples. In human prostate cancer cells, RAI17 increases the transcriptional activity of AR. Studies using sumoylation-deficient AR mutants suggest that the increase of AR activity by RAI17 is dependent upon receptor sumoylation.