

Cezf Antibody (C-term) Blocking Peptide Synthetic peptide Catalog # BP1972b

Specification

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

Primary Accession

<u>P34447</u>

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

Gene ID 176237

Other Names Uncharacterized protein F54F22, isoform a, F54F22/F54F23/F54F24

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP1972b was selected from the C-term region of human Cezf. 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.

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

Name zfp-1 {ECO:0000312|WormBase:F54F2.2a}

Function

Recruits the histone methyltransferase dot-1.1 to chromatin to methylate 'Lys-79' of histone H3 and activate transcription (PubMed:23806335). Recognizes and binds histone H3 methylated at 'Lys- 4' (H3K4me) at the promoters of target genes (PubMed:23263989). During stress, the zfp-1-dot-1.1 complex also plays a role in the deubiquitination of histone H2B sites, which negatively modulates the RNA polymerase II-induced transcription of highly expressed genes (PubMed:<a href="http://www.uniprot.org/citations/23806335"

target="_blank">23806335). In response to stress, binds to the pdk-1 promoter to negatively regulate pdk-1 expression, which negatively modulates daf-16/FOXO-mediated gene expression (PubMed:21980302). Thus, most likely via this mechanism, in response to stress, it confers a protective role against



neuronal necrosis (PubMed:25422944). Plays a role in Insulin/IGF-1-like signaling (IIS)- and diet restriction- mediated lifespan extension by controlling daf-16/FOXO and pha-4/FOXA recruitment to target promoters (PubMed:27039057). May negatively regulate the expression of genes required for vulval development (PubMed:16507136, PubMed:16507136, PubMed:16710447). May play a role in axon guidance in D-type motor neurons (PubMed:24066155). May suppress sensitivity to RNAi (PubMed:16507136).

Cellular Location

Nucleus. Chromosome Note=Localizes to all six condensed chromosomes (PubMed:23263989). zfp-1 and dot-1.1 colocalize to promoters of highly expressed genes (PubMed:23806335).

Tissue Location

Isoform a: Expressed at high levels in maturing oocytes, but at low levels in the rest of the germ line (at protein level) (PubMed:23263989). Isoform a: Not expressed in the pharynx, germ line and tail (PubMed:27039057). Isoform c: Not expressed in the germ line (at protein level) (PubMed:23263989). Isoform c: Uniformly expressed (PubMed:27039057).

Cezf Antibody (C-term) Blocking Peptide - Protocols

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

Blocking Peptides

Cezf Antibody (C-term) Blocking Peptide - Images

Cezf Antibody (C-term) Blocking Peptide - Background

CEZF bears substantial homology to the zinc finger and leucine zipper motifs of the human gene products AF10, MLLT6, and BR140. The functional domain of the zing finger motif, which is structurally different from previously described zinc finger motifs, is potentially disrupted in leukemia-associated chromosomal translocations. This zinc finger motif present in CEZF, called the leukemia-associated protein (LAP) finger, is an important DNA-binding domain in this group of regulatory proteins, and may be involved in leukemogenesis.

Cezf Antibody (C-term) Blocking Peptide - References

Saha, V, et al. PNAS USA. 1995. 92(21): 9737[]?741.