

Mouse Ctr9 Blocking Peptide (C-term) Synthetic peptide Catalog # BP21039a

Specification

Mouse Ctr9 Blocking Peptide (C-term) - Product Information

Primary Accession Other Accession <u>Q62018</u> <u>Q6PD62</u>

Mouse Ctr9 Blocking Peptide (C-term) - Additional Information

Gene ID 22083

Other Names

RNA polymerase-associated protein CTR9 homolog, SH2 domain-binding protein 1, Tetratricopeptide repeat-containing, SH2-binding phosphoprotein of 150 kDa, TPR-containing, SH2-binding phosphoprotein of 150 kDa, p150TSP, Ctr9, Kiaa0155, Sh2bp1

Target/Specificity The synthetic peptide sequence is selected from aa 1022-1036 of HUMAN Ctr9

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.

Mouse Ctr9 Blocking Peptide (C-term) - Protein Information

Name Ctr9

Synonyms Kiaa0155, Sh2bp1

Function

Component of the PAF1 complex (PAF1C) which has multiple functions during transcription by RNA polymerase II and is implicated in regulation of development and maintenance of embryonic stem cell pluripotency. PAF1C associates with RNA polymerase II through interaction with POLR2A CTD non-phosphorylated and 'Ser-2'- and 'Ser- 5'-phosphorylated forms and is involved in transcriptional elongation, acting both independently and synergistically with TCEA1 and in cooperation with the DSIF complex and HTATSF1. PAF1C is required for transcriptional activity of KMT2A/MLL1. PAF1C is involved in histone modifications such as ubiquitination of histone H2B and methylation on histone H3 'Lys-4' (H3K4me3). PAF1C recruits the RNF20/40 E3 ubiquitin-protein ligase complex and the E2 enzyme UBE2A or UBE2B to chromatin which mediate



monoubiquitination of 'Lys-120' of histone H2B (H2BK120ub1); UB2A/B-mediated H2B ubiquitination is proposed to be coupled to transcription. PAF1C is involved in mRNA 3' end formation probably through association with cleavage and poly(A) factors. Required for mono- and trimethylation on histone H3 'Lys-4' (H3K4me3) and dimethylation on histone H3 'Lys-79' (H3K4me3). Required for Hox gene transcription (By similarity). Required for the trimethylation of histone H3 'Lys-4' (H3K4me3) on genes involved in stem cell pluripotency; this function is synergistic with CXXC1 indicative for an involvement of the SET1 complex. Involved in transcriptional regulation of IL6-responsive genes and in JAK-STAT pathway; may regulate DNA-association of STAT3.

Cellular Location Nucleus speckle.

Tissue Location Widely expressed..

Mouse Ctr9 Blocking Peptide (C-term) - Protocols

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

• <u>Blocking Peptides</u> Mouse Ctr9 Blocking Peptide (C-term) - Images

Mouse Ctr9 Blocking Peptide (C-term) - Background

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Mouse Ctr9 Blocking Peptide (C-term) - References

Malek S.N.,et al.J. Biol. Chem. 271:6952-6962(1996). Carninci P.,et al.Science 309:1559-1563(2005). Okazaki N.,et al.DNA Res. 9:179-188(2002). Ballif B.A.,et al.Mol. Cell. Proteomics 3:1093-1101(2004). Youn M.Y.,et al.J. Biol. Chem. 282:34727-34734(2007).