10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

WBSCR22 Blocking Peptide (C-term)

Synthetic peptide
Catalog # BP20254b

Specification

WBSCR22 Blocking Peptide (C-term) - Product Information

Primary Accession	O43709
Other Accession	Q9CY21, Q58DP0, NP_059998.2

WBSCR22 Blocking Peptide (C-term) - Additional Information

Gene ID 114049

Other Names
Probable 18S rRNA (guanine-N(7))-methyltransferase, 211-, Bud site selection protein 23 homolog, Metastasis-related methyltransferase 1, Williams-Beuren syndrome chromosomal region 22 protein, WBSCR22, MERM1

Target/Specificity
The synthetic peptide sequence is selected from aa 268-281 of HUMAN WBSCR22

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.

WBSCR22 Blocking Peptide (C-term) - Protein Information

Name BUD23 (HGNC:16405)

Synonyms MERM1, WBSCR22

Function
S-adenosyl-L-methionine-dependent methyltransferase that specifically methylates the N(7) position of a guanine in 18S rRNA (PubMed:25851604). Requires the methyltransferase adapter protein TRM112 for full rRNA methyltransferase activity (PubMed:25851604). Involved in the pre-rRNA processing steps leading to small-subunit rRNA production independently of its RNA-modifying catalytic activity (PubMed:25851604). Important for biogenesis end export of the 40S ribosomal subunit independent on its methyltransferase activity (PubMed:24086612). Locus-specific steroid receptor coactivator. Potentiates transactivation by glucocorticoid (NR3C1),

mineralocorticoid (NR3C2), androgen (AR) and progesterone (PGR) receptors (PubMed:24488492). Required for the maintenance of open chromatin at the TSC22D3/GILZ locus to facilitate NR3C1 loading on the response elements (PubMed:24488492). Required for maintenance of dimethylation on histone H3 'Lys-79' (H3K79me2), although direct histone methyltransferase activity is not observed in vitro (PubMed:24488492).

Cellular Location
Nucleus. Nucleus, nucleoplasm. Cytoplasm, perinuclear region. Cytoplasm. Note=Localized diffusely throughout the nucleus and the cytoplasm (PubMed:24488492). Localizes to a polarized perinuclear structure, overlapping partially with the Golgi and lysosomes (PubMed:25851604). Localization is not affected by glucocorticoid treatment (PubMed:24488492)

Tissue Location
Widely expressed, with high levels in heart, skeletal muscle and kidney. Detected at high levels in bronchial brushings and in normal lung (at protein level). In fetal lung tissue, expressed in the developing bronchial lumen lining cells (at protein level). Tends to be down-regulated in lungs affected by inflammatory diseases or neoplasia (at protein level). Expressed in immune cells, including B and T lymphocytes and macrophages

WBSCR22 Blocking Peptide (C-term) - Protocols

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

- Blocking Peptides

WBSCR22 Blocking Peptide (C-term) - Images

WBSCR22 Blocking Peptide (C-term) - Background

This gene encodes a protein containing a nuclear localization signal and an S-adenosyl-L-methionine binding motif typical of methyltransferases, suggesting that the encoded protein may act on DNA methylation. This gene is deleted in Williams syndrome, a multisystem developmental disorder caused by the deletion of contiguous genes at 7q11.23.

WBSCR22 Blocking Peptide (C-term) - References

Lamesch, P., et al. Genomics 89(3):307-315(2007)
Andersen, J.S., et al. Nature 433(7021):77-83(2005)
Wan, D., et al. Proc. Natl. Acad. Sci. U.S.A. 101(44):15724-15729(2004)
Merla, G., et al. Hum. Genet. 110(5):429-438(2002)
Stanchi, F., et al. Yeast 18(1):69-80(2001)