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

WBSCR22 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20254b

Product Information

Application	WB, E
Primary Accession	O43709
Other Accession	Q9CY21, Q58DP0, NP_059998.2
Reactivity	Human
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42713
Calculated MW	31880
Antigen Region	253-281

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	This WBSCR22 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 253-281 amino acids from the C-terminal region of human WBSCR22.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	WBSCR22 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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

Background

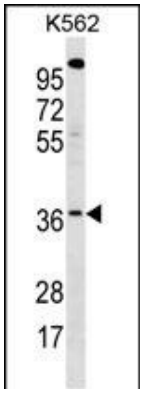
This gene encodes a protein containing a nuclear localization signal and an S-adenosyl-L-methionine binding motif typical of methyltransferases, suggesting that the encoded protein may act on DNA methylation. This gene is deleted in Williams syndrome, a multisystem developmental disorder caused by the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

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)

Images

WBSCR22 Antibody (C-term) (Cat. #AP20254b) western blot analysis in K562 cell line lysates (35ug/lane).This demonstrates the WBSCR22 antibody detected the WBSCR22 protein (arrow).



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.