

#### YEATS4 Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12922a

#### Specification

# YEATS4 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB,E <u>095619</u> <u>NP\_006521.1</u> Human Rabbit Polyclonal Rabbit IgG 26499

## YEATS4 Antibody - Additional Information

Gene ID 8089

Other Names YEATS domain-containing protein 4, Glioma-amplified sequence 41, Gas41, NuMA-binding protein 1, NuBI-1, NuBI1, YEATS4, GAS41

#### Target/Specificity

This YEATS4 antibody is generated from rabbits immunized with a recombinant protein from human YEATS4.

Dilution WB~~1:1000

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** YEATS4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# YEATS4 Antibody - Protein Information

Name YEATS4 (<u>HGNC:24859</u>)

**Function** Chromatin reader component of the NuA4 histone acetyltransferase (HAT) complex, a complex involved in transcriptional activation of select genes principally by acetylation of nucleosomal histones H4 and H2A (PubMed:<u>12963728</u>, PubMed:<u>14966270</u>). Specifically recognizes



and binds acylated histone H3, with a preference for histone H3 diacetylated at 'Lys-18' and 'Lys-27' (H3K18ac and H3K27ac) or histone H3 diacetylated at 'Lys-14' and 'Lys-27' (H3K14ac and H3K27ac) (PubMed:<u>29437725</u>, PubMed:<u>30071723</u>, PubMed:<u>29900004</u>). Also able to recognize and bind crotonylated histone H3 (PubMed:<u>30071723</u>). May also recognize and bind histone H3 succinylated at 'Lys-122' (H3K122succ); additional evidences are however required to confirm this result in vivo (PubMed:<u>29463709</u>). Plays a key role in histone variant H2AZ1/H2A.Z deposition into specific chromatin regions: recognizes and binds H3K14ac and H3K27ac on the promoters of actively transcribed genes and recruits NuA4-related complex to deposit H2AZ1/H2A.Z (PubMed:<u>29437725</u>). H2AZ1/H2A.Z deposition is required for maintenance of embryonic stem cell (By similarity).

Cellular Location Nucleus {ECO:0000255|PROSITE-ProRule:PRU00376, ECO:0000269|PubMed:10913114, ECO:0000269|PubMed:18445686}

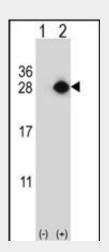
**Tissue Location** Expressed in brain, heart, kidney, liver, lung, pancreas, placenta and skeletal muscle.

## YEATS4 Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## YEATS4 Antibody - Images



Western blot analysis of YEATS4 (arrow) using rabbit polyclonal YEATS4 Antibody (Cat. #AP12922a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the YEATS4 gene.

# YEATS4 Antibody - Background

The protein encoded by this gene is found in the nucleoli.



It has high sequence homology to human MLLT1, and yeast and human MLLT3 proteins. Both MLLT1 and MLLT3 proteins belong to a class of transcription factors, indicating that the encoded protein might also represent a transcription factor. This protein is thought to be required for RNA transcription. This gene has been shown to be amplified in tumors.

# YEATS4 Antibody - References

Heisel, S., et al. BMC Mol. Biol. 11, 53 (2010) : Turner, S.T., et al. Hypertension 52(2):359-365(2008) Italiano, A., et al. Int. J. Cancer 122(10):2233-2241(2008) Gudbjartsson, D.F., et al. Nat. Genet. 40(5):609-615(2008) Park, J.H., et al. Mol. Cell. Biol. 26(11):4006-4016(2006)