

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1910a

Specification

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region

O95619 O9CR11 Human Mouse Rabbit Polyclonal Rabbit IgG 26499 16-46

WB,E

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) - 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 GAS41 (YEATS4/NuBI-1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 16-46 amino acids from the N-terminal region of human GAS41 (YEATS4/NuBI-1).

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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) is for research use only and not for use in diagnostic or therapeutic procedures.

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) - Protein Information



Name YEATS4 (HGNC:24859)

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>29900004</u>, PubMed:<u>30071723</u>). Also able to recognize and bind crotonylated histone H3 (PubMed:<u>30071723</u>). May also recognize and bind histone H3 succinylated at 'Lys-12' (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

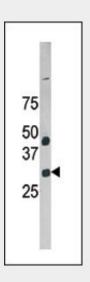
Expressed in brain, heart, kidney, liver, lung, pancreas, placenta and skeletal muscle.

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) - Protocols

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

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

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) - Images





Western blot analysis of anti-NuBI-1 Pab (Cat. #AP1910a) in HepG2 cell line lysate. NuBI-1(arrow) was detected using the purified Pab.

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) - Background

NuBI-1 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. The gene for this protein has been shown to be amplified in tumors.

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) - References

Cai, Y., et al., J. Biol. Chem. 278(44):42733-42736 (2003). Lauffart, B., et al., Genomics 81(2):192-201 (2003). Zimmermann, K., et al., J. Biol. Chem. 277(21):18626-18631 (2002). Debernardi, S., et al., Blood 99(1):275-281 (2002). Munnia, A., et al., Oncogene 20(35):4853-4863 (2001).