

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) Blocking peptide Synthetic peptide Catalog # BP1910a

Specification

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

Primary Accession

<u>095619</u>

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

The synthetic peptide sequence used to generate the antibody AP1910a was selected from the N-term region of human NuBI-1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) Blocking peptide - 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:12963728, PubMed:12963728, PubMed:14966270). 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:29437725, PubMed:29437725, PubMed:29900004, PubMed:2900004, PubMed:30071723). Also able to recognize and bind crotonylated histone H3 (PubMed:<a



href="http://www.uniprot.org/citations/30071723" target="_blank">30071723). May also recognize and bind histone H3 succinylated at 'Lys-122' (H3K122succ); additional evidences are however required to confirm this result in vivo (PubMed:29463709). 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:29437725). 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) Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

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

GAS41 (YEATS4/NuBI-1) Antibody (N-term A31) Blocking peptide - 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) Blocking peptide - 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).