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GAS41 (YEATS4/NuBI-1) Antibody (N-term F2)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1902d

Product Information

Application	WB, E
Primary Accession	O95619
Other Accession	Q9CR11
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB8916
Calculated MW	26499

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 selected from the N-terminal region of human 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 F2) is for research use only and not for use in diagnostic or therapeutic procedures.

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: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:29900004, PubMed:30071723). Also able to recognize and bind crotonylated histone H3 (PubMed: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.

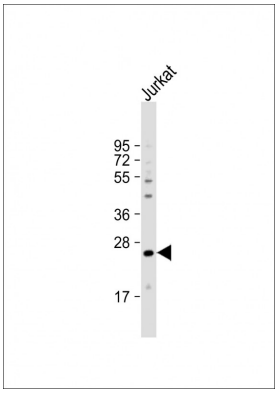
Background

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.

References

Zimmermann, K., et al., J. Biol. Chem. 277(21):18626-18631 (2002).
Debernardi, S., et al., Blood 99(1):275-281 (2002).
Harborth, J., et al., J. Biol. Chem. 275(41):31979-31985 (2000).
Fischer, U., et al., Hum. Mol. Genet. 6(11):1817-1822 (1997).
Gracia, E., et al., Hum. Mol. Genet. 5(5):595-600 (1996).

Images



Anti-NuBI-1 Antibody at 1:1000 dilution + Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 26 kDa Blocking/Dilution buffer: 5% NFDM/TBST.