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GAS1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11869a

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	P54826
Other Accession	Q01721, NP_002039
Reactivity	Human, Mouse
Predicted	Rat, Bovine, Canine, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB14523
Calculated MW	35693
Antigen Region	95-127

Additional Information

Gene ID	2619
Other Names	Growth arrest-specific protein 1, GAS-1, GAS1
Target/Specificity	This GAS1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 95-127 amino acids from the N-terminal region of human GAS1.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 FC~~1:10~50 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	GAS1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GAS1 {ECO:0000303|PubMed:8127893, ECO:0000312|HGNC:HGNC:4165}
Function	Coreceptor required for sonic hedgehog (SHH) handoff to its receptor: binds to the dually lipid-modified Sonic hedgehog protein N- product (ShhN)

	downstream of the CDON-BOC heterodimer and directly transfers ShhN to its patched receptor (PTCH1 or PTCH2), followed by activation of the smoothened signaling pathway (PubMed:35231446). Specifically recognizes and binds palmitate and cholesterol moieties in dually lipid-modified ShhN (PubMed:35231446). Binds 20(S)- hydroxycholesterol (20(S)-OHC) (By similarity). Acts as a growth arrest protein involved in growth suppression by blocking entry to S phase (PubMed:8127893).
Cellular Location	Cell membrane; Lipid-anchor, GPI-anchor {ECO:0000250|UniProtKB:Q01721}; Extracellular side {ECO:0000250|UniProtKB:Q01721}

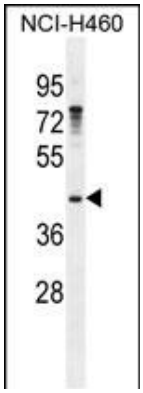
Background

Growth arrest-specific 1 plays a role in growth suppression. GAS1 blocks entry to S phase and prevents cycling of normal and transformed cells. Gas1 is a putative tumor suppressor gene.

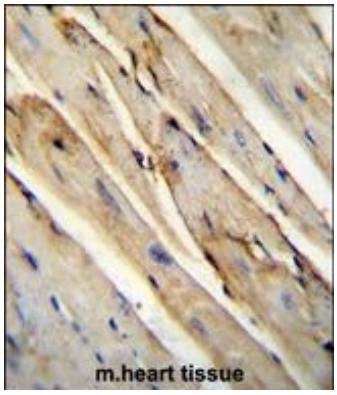
References

Ribeiro, L.A., et al. Am. J. Med. Genet. A 152A (7), 1688-1694 (2010) : Johnatty, S.E., et al. PLoS Genet. 6 (7), E1001016 (2010) : Rittie, L., et al. Aging Cell 8(6):738-751(2009) Zhao, L., et al. J. Biol. Chem. 284(39):26273-26285(2009) Dominguez-Monzon, G., et al. Int. J. Dev. Neurosci. 27(4):305-313(2009)

Images

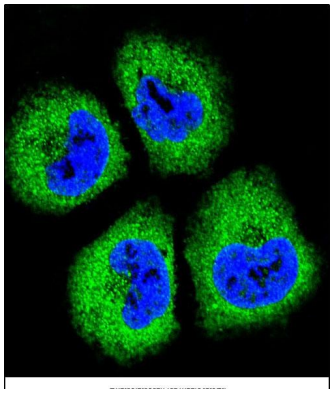


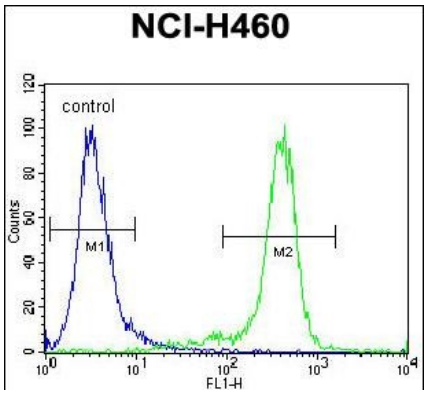
GAS1 Antibody (N-term) (Cat. #AP11869a) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the GAS1 antibody detected the GAS1 protein (arrow).



GAS1 Antibody (N-term) (Cat. #AP11869a)immunohistochemistry analysis in formalin fixed and paraffin embedded mouse heart tissue tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of GAS1 Antibody (N-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Confocal immunofluorescent analysis of GAS1 Antibody (N-term) (Cat. #AP11869a) with NCI-H460 cell followed by Alexa Fluor® 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).





GAS1 Antibody (N-term) (Cat. #AP11869a) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Gas1 Inhibits Metastatic and Metabolic Phenotypes in Colorectal Carcinoma.

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