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Schillerstr. 5

## AP30357PU-N Polyclonal Antibody to GAS - Aff - Purified

Alternate names: Glutamate-rich coactivator interacting with SRC1, PA1, PTIP-associated 1 protein

Quantity: 0.1 mg
Concentration: 1.0 mg/ml

Background: Steroid receptor co-activators (SRCs) were initially described as nuclear receptor

transcription co-activators, but they have recently been determined to co-regulate transcription initiated by other transcription factors. GAS is a recently identified glutamate-rich protein that interacts with SRC1, but not GRIP1 or AIB1, the other two members of the SRC family. GAS can also interact with the alpha subunit of the estrogen receptor (ERa), but not other receptors such as the retinoic acid receptor a, suggesting the interaction between GAS and ERa is relatively specific. Depletion of GAS by RNA interference in MCF7 cells led to a decrease in the mRNA and protein levels of ER target genes such as pS2, c-Myc and cyclin D1, indicating the role of GAS in the regulation of ER target genes. GAS has also been found to associate with an SET1-like methyltransferase complex specific for H3K4 methylation, suggesting that

GAS has multiple roles in transcriptional regulation.

 Uniprot ID:
 P08315

 NCBI:
 NP 078792

 GeneID:
 11185594

 Host / Isotype:
 Rabbit / IgG

**Immunogen:** GAS antibody was raised against a 15 amino acid peptide from near the carboxy

terminus of human GAS. (AP30357CP-N)

Format: State: Liquid purified Ig fraction

Purification: Affinity chromatography purified via peptide column

Buffer System: PBS containing 0.02% sodium azide.

Applications: ELISA.

Western Blot: 1 - 2 μg/ml.

Other applications not tested. Optimal dilutions are dependent on conditions and

should be determined by the user.

**Specificity: Species:** Human, mouse

Other species not tested.

Add. Information: Blocking peptide available: blocking peptide (AP30357CP-N)

Store the antibody (in aliquots) at -20°C.

Avoid repeated freezing and thawing. Shelf life: one year from despatch.

General Readings: 1. Xu J, Wu RC, O'Malley BW. Normal and cancer-related functions of the p160 steroid

receptor co-activator (SRC) family. Nat Rev Cancer. 2009 Sep;9(9):615-30. doi:

10.1038/nrc2695. PubMed PMID: 19701241.

2. Liang J, Zhang H, Zhang Y, Zhang Y, Shang Y. GAS, a new glutamate-rich protein, interacts differentially with SRCs and is involved in oestrogen receptor function.



EMBO Rep. 2009 Jan;10(1):51-7. doi: 10.1038/embor.2008.223. Epub 2008 Nov 28. PubMed PMID: 19039327.

3. Cho YW, Hong T, Hong S, Guo H, Yu H, Kim D, et al. PTIP associates with MLL3- and MLL4-containing histone H3 lysine 4 methyltransferase complex. J Biol Chem. 2007 Jul 13;282(28):20395-406. Epub 2007 May 11. PubMed PMID: 17500065.

**Pictures:** 

Western blot analysis of GAS in EL4 cell lysate in (A) the absence and (B) the presence of blocking peptide with GAS antibody at  $1\mu g/ml$ .

