

GAS2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55123

Specification

GAS2 Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>O43903</u>

Reactivity Rat, Pig, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 35 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human GAS2

Epitope Specificity 141-240/313

Isotype Purity

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm > cytoskeleton. Membrane. Component of the microfilament system.

Colocalizes with actin fibers at the cell border and along the stress fibers in growth-arrested fibroblasts. Mainly

membrane-associated. When

hyperphosphorylated, accumulates at

membrane ruffles.

SIMILARITY Belongs to the GAS2 family. Contains 1 CH

(calponin-homology) domain. Contains 1

GAR domain.

Post-translational modifications Cleaved, during apoptosis, on a specific

aspartic residue by caspases.

Phosphorylated on serine residues during

the G0-G1 transition phase.

Important Note

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

Background Descriptions

Gas2 is a 313 amino acid protein encoded by the human gene GAS2. Gas2 is thought to play a role in apoptosis by acting as a cell death substrate for caspases. Gas2, a component of the microfilament system, is cleaved by a caspase (caspase-3 and caspase-7) at Asparagine 278 during apoptosis. The cleaved form resulting from this dramatically induces the rearrangement of the Actin cytoskeleton and causes potent changes in the shape of the affected cells. Gas2 is believed to also be involved in the membrane ruffling process. During the G0-G1 transition phase Gas2 can be found phosphorylated on its serine residues. Gas2 is a cytoskeleton and peripheral membrane protein that co-localizes with Actin fibers at the cell border and along the stress fibers in growth-arrested fibroblasts. Gas2 is mainly membrane-associated but when hyperphosphorylated it will accumulate at membrane ruffles. Gas2 is specifically expressed at



growth arrest and is ubiquitously expressed with highest levels found in liver, lung and kidney. There is no evidence, however, of Gas2 expression in spleen.

GAS2 Polyclonal Antibody - Additional Information

Gene ID 2620

Other Names

Growth arrest-specific protein 2, GAS-2, GAS2

Target/Specificity

Ubiquitously expressed with highest levels in liver, lung, and kidney. Not found in spleen.

Dilution

```
<span class ="dilution_IHC-P">IHC-P~~N/A</span><br \> <span class
="dilution_IHC-F">IHC-F~~N/A</span><br \> <span class
="dilution_IF">IF~~1:50~200</span><br \> <span class ="dilution_ICC">ICC~~N/A</span><br \> <span class ="dilution_E">E~~N/A</span>
```

Storage

Store at -20 $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 $^{\circ}$ C.

GAS2 Polyclonal Antibody - Protein Information

Name GAS2

Function

Required to maintain microtubule bundles in inner ear supporting cells, affording them with mechanical stiffness to transmit sound energy through the cochlea.

Cellular Location

Cytoplasm, cytoskeleton, stress fiber. Membrane {ECO:0000250|UniProtKB:P11862}; Peripheral membrane protein {ECO:0000250|UniProtKB:P11862} Note=Component of the microfilament system. Colocalizes with actin fibers at the cell border and along the stress fibers in growth-arrested fibroblasts. Mainly membrane-associated. When hyperphosphorylated, accumulates at membrane ruffles (By similarity) Colocalizes with detyrosinated alpha-tubulin along the length of microtubule bundles in inner and outer pillar cells (By similarity) {ECO:0000250|UniProtKB:P11862}

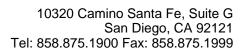
Tissue Location

Ubiquitously expressed with highest levels in liver, lung, and kidney. Not found in spleen

GAS2 Polyclonal Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry





- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GAS2 Polyclonal Antibody - Images