

# GAS2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP55123

## Product Information

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<b>Application</b>	IHC-P, IHC-F, IF, ICC, E
<b>Primary Accession</b>	<a href="#">O43903</a>
<b>Reactivity</b>	Rat, Pig, Bovine
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	34945
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human GAS2
<b>Epitope Specificity</b>	141-240/313
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	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.
<b>SIMILARITY</b>	Belongs to the GAS2 family. Contains 1 CH (calponin-homology) domain. Contains 1 GAR domain.
<b>Post-translational modifications</b>	Cleaved, during apoptosis, on a specific aspartic residue by caspases. Phosphorylated on serine residues during the G0-G1 transition phase.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</b>	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.

## Additional Information

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Gene ID 2620

<b>Other Names</b>	Growth arrest-specific protein 2, GAS-2, GAS2
<b>Target/Specificity</b>	Ubiquitously expressed with highest levels in liver, lung, and kidney. Not found in spleen.
<b>Dilution</b>	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
<b>Format</b>	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
<b>Storage</b>	Store at -20 °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 °C.

## Protein Information

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<b>Name</b>	GAS2
<b>Function</b>	Required to maintain microtubule bundles in inner ear supporting cells, affording them with mechanical stiffness to transmit sound energy through the cochlea.
<b>Cellular Location</b>	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}
<b>Tissue Location</b>	Ubiquitously expressed with highest levels in liver, lung, and kidney. Not found in spleen

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