

## Recombinant Human GAR1, GST-tagged

Cat. No. GAR1-13156H Lot. No. (See product label)

### SPECIFICATION

**Product Overview** Recombinant Human GAR1 protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.

**Species** Human

**Source** E.coli

**ProteinLength** 1-217a.a.

#### Description

Cytosolic and membrane-bound forms of glutathione S-transferase are encoded by two distinct supergene families. These enzymes function in the detoxification of electrophilic compounds, including carcinogens, therapeutic drugs, environmental toxins and products of oxidative stress, by conjugation with glutathione. The genes encoding these enzymes are known to be highly polymorphic. These genetic variations can change an individuals susceptibility to carcinogens and toxins as well as affect the toxicity and efficacy of some drugs. At present, eight distinct classes of the soluble cytoplasmic mammalian glutathione S-transferases have been identified: alpha, kappa, mu, omega, pi, sigma, theta and zeta. This gene encodes a glutathione S-transferase belonging to the alpha class. The alpha class genes, located in a cluster mapped to chromosome 6, are the most abundantly expressed glutathione S-transferases in liver. In addition to metabolizing bilirubin and certain anti-cancer drugs in the liver, the alpha class of these enzymes exhibit glutathione peroxidase activity thereby protecting the cells from reactive oxygen species and the products of peroxidation.

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<b>Storage</b>	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
<b>Storage Buffer</b>	1M PBS (58mM Na <sub>2</sub> HPO <sub>4</sub> , 17mM NaH <sub>2</sub> PO <sub>4</sub> , 68mM NaCl, pH8. ) added with 100mM GSH and 1% Triton X-100, 15% glycerol.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	<a href="#">GAR1</a> GAR1 ribonucleoprotein homolog (yeast) [ Homo sapiens ]
<b>Official Symbol</b>	GAR1
<b>Synonyms</b>	GAR1 ribonucleoprotein homolog (yeast); 14264; Ensembl:ENSG00000109534; H/ACA ribonucleoprotein complex subunit 1; snoRNP protein GAR1; nucleolar protein family A member 1; nucleolar protein family A, member 1 (H/ACA small nucleolar RNPs); NOLA1
<b>Gene ID</b>	<a href="#">54433</a>
<b>mRNA Refseq</b>	<a href="#">NM_018983.3</a>
<b>Protein Refseq</b>	<a href="#">NP_061856.1</a>
<b>MIM</b>	<a href="#">606468</a>
<b>UniProt ID</b>	<a href="#">Q9NY12</a>
<b>Chromosome Location</b>	4q25
<b>Pathway</b>	H/ACA ribonucleoprotein complex, organism-specific biosystem; Ribosome

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biogenesis in eukaryotes, organism-specific biosystem; Ribosome biogenesis in eukaryotes, conserved biosystem;

**Function**

cation channel activity; pseudouridine synthase activity; snoRNA binding;

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