Product name:	GAR1 Rabbit Polyclonal Antibody
Cat number:	ABN11296
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from human protein . at AA range: 110-190
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight:	23kDa
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

This gene is a member of the H/ACA snoRNPs (small nucleolar ribonucleoproteins) gene family. snoRNPs are involved in various aspects of rRNA processing and modification and have been classified into two families: C/D and H/ACA. The H/ACA snoRNPs also include the DKC1, NOLA2 and NOLA3 proteins. These four H/ACA snoRNP proteins localize to the dense fibrillar components of nucleoli and to coiled (Cajal) bodies in the nucleus. Both 18S rRNA production and rRNA pseudouridylation are impaired if any one of the four proteins is depleted. These four H/ACA snoRNP proteins are also components of the telomerase complex. The encoded protein of this gene contains two glycine- and arginine-rich domains and is related to Saccharomyces cerevisiae Gar1p. Two splice variants have been found for this gene. [provided by RefSeq, Jul 2008],domain:Interaction with SMN1 requires at least one of the RGG-box regions.,function:Required for ribosome biogenesis and telomere maintenance. Part of the H/ACA small nucleolar ribonucleoprotein (H/ACA snoRNP) complex, which catalyzes pseudouridylation of rRNA. This involves the isomerization of uridine such that the ribose is subsequently attached to C5, instead of the normal N1. Each rRNA can contain up to 100 pseudouridine ("psi") residues, which may serve to stabilize the conformation of rRNAs. May also be required for correct processing or intranuclear trafficking of TERC, the RNA component of the telomerase reverse transcriptase (TERT) holoenzyme.,similarity:Belongs to the GAR1 family.,subcellular location:Also localized to Cajal bodies (coiled bodies).,subunit:Part of the H/ACA small nucleolar ribonucleoprotein (H/ACA snoRNP) complex, which contains NHP2/NOLA2, GAR1/NOLA1, NOP10/NOLA3, and DKC1/NOLA4, which is presumed to be the catalytic subunit. The complex contains a stable core formed by binding of one or two NOP10-DKC1 heterodimers to NHP2; GAR1 subsequently binds to this core via DKC1. The complex binds a box H/ACA small nucleolar RNA (snoRNA), which may target the specific site of modification within the RNA substrate. The complex also interacts with TERC, which contains a 3'-terminal domain related to the box H/ACA snoRNAs. Specific interactions with snoRNAs or TERC are mediated by GAR1 and NHP2. Associates with NOLC1/NOPP140. H/ACA snoRNPs interact with the SMN complex, consisting of SMN1 or SMN2, SIP1/GEMIN2, DDX20/GEMIN3, and GEMIN4. This is mediated by interaction between GAR1 and SMN1 or SMN2. The SMN complex may be required for correct assembly of the H/ACA snoRNP complex. Component of the telomerase holoenzyme complex at least composed of TERT, DKC1, WDR79/TCAB1, NOP10, NHP2, GAR1, TEP1, EST1A, POT1 and a telomerase RNA template component (TERC).,