

GLTSCR2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17365b

Specification

GLTSCR2 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	<u>Q9NZM5</u>
Other Accession	<u>NP_056525.2</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	54389
Antigen Region	430-458

GLTSCR2 Antibody (C-term) - Additional Information

Gene ID 29997

Other Names Glioma tumor suppressor candidate region gene 2 protein, p60, GLTSCR2

Target/Specificity

This GLTSCR2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 430-458 amino acids from the C-terminal region of human GLTSCR2.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions GLTSCR2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GLTSCR2 Antibody (C-term) - Protein Information

Name NOP53 (HGNC:4333)

Function Nucleolar protein which is involved in the integration of the 5S RNP into the ribosomal



large subunit during ribosome biogenesis (PubMed:<u>24120868</u>). In ribosome biogenesis, may also play a role in rRNA transcription (PubMed:27729611). Also functions as a nucleolar sensor that regulates the activation of p53/TP53 in response to ribosome biogenesis perturbation, DNA damage and other stress conditions (PubMed:21741933, PubMed:24120868, PubMed:27829214). DNA damage or perturbation of ribosome biogenesis disrupt the interaction between NOP53 and RPL11 allowing RPL11 transport to the nucleoplasm where it can inhibit MDM2 and allow p53/TP53 activation (PubMed:24120868, PubMed:27829214). It may also positively regulate the function of p53/TP53 in cell cycle arrest and apoptosis through direct interaction, preventing its MDM2-dependent ubiquitin-mediated proteasomal degradation (PubMed: 22522597). Originally identified as a tumor suppressor, it may also play a role in cell proliferation and apoptosis by positively regulating the stability of PTEN, thereby antagonizing the PI3K-AKT/PKB signaling pathway (PubMed: 15355975, PubMed: 16971513, PubMed: 27729611). May also inhibit cell proliferation and increase apoptosis through its interaction with NF2 (PubMed:21167305). May negatively regulate NPM1 by regulating its nucleoplasmic localization, oligomerization and ubiquitin-mediated proteasomal degradation (PubMed: 25818168). Thereby, may prevent NPM1 interaction with MYC and negatively regulate transcription mediated by the MYC-NPM1 complex (PubMed: 25956029). May also regulate cellular aerobic respiration (PubMed: 24556985). In the cellular response to viral infection, may play a role in the attenuation of interferon-beta through the inhibition of RIGI (PubMed:27824081).

Cellular Location

Nucleus, nucleolus. Nucleus, nucleoplasm. Note=In the nucleolus may be more specifically localized to the fibrillar center (PubMed:27729611). Mainly nucleolar it relocalizes to the nucleoplasm under specific conditions including ribosomal stress enabling it to interact and regulate nucleoplasmic proteins like p53/TP53 (PubMed:22522597, PubMed:24923447, PubMed:26903295, PubMed:27323397) Also detected in the cytosol (PubMed:24923447, PubMed:27824081)

Tissue Location

Expressed at high levels in heart and pancreas, moderate levels in placenta, liver, skeletal muscle, and kidney, and low levels in brain and lung.

GLTSCR2 Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- GLTSCR2 Antibody (C-term) Images



GLTSCR2 Antibody (C-term) (Cat. #AP17365b) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the GLTSCR2 antibody detected the GLTSCR2 protein (arrow).

GLTSCR2 Antibody (C-term) - Background

Interacts with HSV-1 early proteins ICP22 and ICP0.

GLTSCR2 Antibody (C-term) - References

Kim, J.Y., et al. Pathol. Res. Pract. 206(5):295-299(2010) Kalt, I., et al. J. Virol. 84(6):2935-2945(2010) Kim, Y.J., et al. J. Pathol. 216(2):218-224(2008) Yim, J.H., et al. Cell Death Differ. 14(11):1872-1879(2007) Yim, J.H., et al. Pathobiology 74(5):301-308(2007)