

## **GLTSCR2 Antibody (C-term)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17365b

## **Specification**

## **GLTSCR2** Antibody (C-term) - Product Information

Application WB,E **Primary Accession** O9NZM5 NP 056525.2 Other Accession 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

## **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 (<u>HGNC:4333</u>)

**Function** Nucleolar protein which is involved in the integration of the 5S RNP into the ribosomal large subunit during ribosome biogenesis (PubMed: 24120868). 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:27323397, PubMed:26903295) 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.

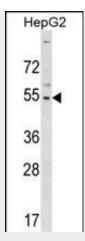
## **GLTSCR2 Antibody (C-term) - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## 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)