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GLTSCR2 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP17365b

Specification

GLTSCR2 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9NZM5

GLTSCR2 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 29997

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GLTSCR2 Antibody (C-term) Blocking Peptide - 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: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) Blocking Peptide - Protocols

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

- Blocking Peptides

GLTSCR2 Antibody (C-term) Blocking Peptide - Images

GLTSCR2 Antibody (C-term) Blocking Peptide - Background

Interacts with HSV-1 early proteins ICP22 and ICP0.

GLTSCR2 Antibody (C-term) Blocking Peptide - 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)