

## GADD45GIP1 Blocking Peptide (N-term)

Synthetic peptide Catalog # BP20586a

# **Specification**

## GADD45GIP1 Blocking Peptide (N-term) - Product Information

**Primary Accession** 

**Q8TAE8** 

# GADD45GIP1 Blocking Peptide (N-term) - Additional Information

**Gene ID 90480** 

#### **Other Names**

Growth arrest and DNA damage-inducible proteins-interacting protein 1, 39S ribosomal protein L59, mitochondrial, MRP-L59, CKII beta-associating protein, CR6-interacting factor 1, CRIF1, Papillomavirus L2-interacting nuclear protein 1, PLINP, PLINP-1, p53-responsive gene 6 protein, GADD45GIP1, MRPL59, PLINP1, PRG6

#### Target/Specificity

The synthetic peptide sequence is selected from aa 33-45 of HUMAN GADD45GIP1

#### **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.

# GADD45GIP1 Blocking Peptide (N-term) - Protein Information

Name GADD45GIP1

Synonyms MRPL59, PLINP1, PRG6

### **Function**

Acts as a negative regulator of G1 to S cell cycle phase progression by inhibiting cyclin-dependent kinases. Inhibitory effects are additive with GADD45 proteins but occurs also in the absence of GADD45 proteins. Acts as a repressor of the orphan nuclear receptor NR4A1 by inhibiting AB domain-mediated transcriptional activity. May be involved in the hormone-mediated regulation of NR4A1 transcriptional activity. May play a role in mitochondrial protein synthesis.

### **Cellular Location**

Mitochondrion. Nucleus Note=Using N-terminally tagged constructs, has been found in the nucleus (PubMed:12482659). C-terminally tagged constructs are targeted exclusively to mitochondria (PubMed:22453275). This discrepancy may be explained by masking of a potential N-terminal



mitochondrial targeting signal by the tag (PubMed:22453275).

#### **Tissue Location**

Widely expressed. Highly expressed in the thyroid gland, heart, lymph nodes, trachea and adrenal tissues. Expressed at lower level in liver skeletal muscle, kidney, pancreas, testis, ovary and stomach. Barely detectable in adrenal adenoma and papillary thyroid cancer.

# GADD45GIP1 Blocking Peptide (N-term) - Protocols

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

# • Blocking Peptides

GADD45GIP1 Blocking Peptide (N-term) - Images

### GADD45GIP1 Blocking Peptide (N-term) - Background

Acts as a negative regulator of G1 to S cell cycle phase progression by inhibiting cyclin-dependent kinases. Inhibitory effects are additive with GADD45 proteins but occurs also in the absence of GADD45 proteins. Acts as a repressor of the orphan nuclear receptor NR4A1 by inhibiting AB domain-mediated transcriptional activity. May be involved in the hormone-mediated regulation of NR4A1 transcriptional activity. May play a role in mitochondrial protein synthesis.

# GADD45GIP1 Blocking Peptide (N-term) - References

Goernemann J., et al. Virology 303:69-78(2002). Chung H.K., et al. J. Biol. Chem. 278:28079-28088(2003). Frigimelica E., et al. Submitted (JAN-2003) to the EMBL/GenBank/DDBJ databases. Horikoshi N., et al. Biochem. Biophys. Res. Commun. 261:864-869(1999). Park K.C., et al. Mol. Endocrinol. 19:12-24(2005).