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GIGYF2 Blocking Peptide (Center)

Synthetic peptide
Catalog # BP22003c

Specification

GIGYF2 Blocking Peptide (Center) - Product Information

Primary Accession	Q6Y7W6
Other Accession	Q6Y7W8

GIGYF2 Blocking Peptide (Center) - Additional Information

Gene ID 26058

Other Names
PERQ amino acid-rich with GYF domain-containing protein 2, GRB10-interacting GYF protein 2, Trinucleotide repeat-containing gene 15 protein, GIGYF2, KIAA0642, PERQ2, TNRC15

Target/Specificity
The synthetic peptide sequence is selected from aa 855-869 of HUMAN GIGYF2

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.

GIGYF2 Blocking Peptide (Center) - Protein Information

Name GIGYF2 {ECO:0000303|PubMed:12771153, ECO:0000312|HGNC:HGNC:11960}

Function
Key component of the 4EHP-GYF2 complex, a multiprotein complex that acts as a repressor of translation initiation (PubMed:22751931, PubMed:31439631, PubMed:35878012). In the 4EHP-GYF2 complex, acts as a factor that bridges EIF4E2 to ZFP36/TTP, linking translation repression with mRNA decay (PubMed:31439631). Also recruits and bridges the association of the 4EHP complex with the decapping effector protein DDX6, which is required for the ZFP36/TTP-mediated down-regulation of AU-rich mRNA (PubMed:31439631). May act cooperatively with GRB10 to regulate tyrosine kinase receptor signaling, including IGF1 and insulin receptors (PubMed:12771153). In association with EIF4E2, assists ribosome-associated quality

control (RQC) by sequestering the mRNA cap, blocking ribosome initiation and decreasing the translational load on problematic messages. Part of a pathway that works in parallel to RQC-mediated degradation of the stalled nascent polypeptide (PubMed:32726578). GIGYF2 and EIF4E2 work downstream and independently of ZNF598, which seems to work as a scaffold that can recruit them to faulty mRNA even if alternative recruitment mechanisms may exist (PubMed:32726578).

GIGYF2 Blocking Peptide (Center) - Protocols

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

- Blocking Peptides

GIGYF2 Blocking Peptide (Center) - Images

GIGYF2 Blocking Peptide (Center) - Background

May act cooperatively with GRB10 to regulate tyrosine kinase receptor signaling, including IGF1 and insulin receptors.

GIGYF2 Blocking Peptide (Center) - References

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Ishikawa K.,et al.DNA Res. 5:169-176(1998).
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Ota T.,et al.Nat. Genet. 36:40-45(2004).