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FN3KRP Blocking Peptide (N-Term)

Synthetic peptide
Catalog # BP21419a

Specification

FN3KRP Blocking Peptide (N-Term) - Product Information

Primary Accession Q9HA64

FN3KRP Blocking Peptide (N-Term) - Additional Information

Gene ID 79672

Other Names
Ketosamine-3-kinase, 271-, Fructosamine-3-kinase-related protein, FN3K-RP, FN3K-related protein, FN3KRP

Target/Specificity
The synthetic peptide sequence is selected from aa 24-38 of HUMAN FN3KRP

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.

FN3KRP Blocking Peptide (N-Term) - Protein Information

Name FN3KRP {ECO:0000303|PubMed:15137908, ECO:0000312|HGNC:HGNC:25700}

Function
Ketosamine-3-kinase involved in protein deglycation by mediating phosphorylation of ribuloselysine and psicoselysine on glycated proteins, to generate ribuloselysine-3 phosphate and psicoselysine-3 phosphate, respectively (PubMed:14633848, PubMed:15137908). Ribuloselysine-3 phosphate and psicoselysine-3 phosphate adducts are unstable and decompose under physiological conditions (PubMed:14633848, PubMed:15137908). Not able to phosphorylate fructoselysine (PubMed:14633848).

Tissue Location
Widely expressed; except in skeletal muscle where it is expressed at very low level (PubMed:15331600). Expressed in erythrocytes (PubMed:15137908).

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FN3KRP Blocking Peptide (N-Term) - Protocols

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

- Blocking Peptides

FN3KRP Blocking Peptide (N-Term) - Images

FN3KRP Blocking Peptide (N-Term) - Background

Phosphorylates psicosamines and ribulosamines, but not fructosamines, on the third carbon of the sugar moiety. Protein- bound psicosamine 3-phosphates and ribulosamine 3-phosphates are unstable and decompose under physiological conditions. Thus phosphorylation leads to deglycation.

FN3KRP Blocking Peptide (N-Term) - References

Collard F.,et al.Diabetes 52:2888-2895(2003).
Wiemann S.,et al.Genome Res. 11:422-435(2001).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Collard F.,et al.Biochem. J. 382:137-143(2004).
Oppermann F.S.,et al.Mol. Cell. Proteomics 8:1751-1764(2009).