

FN3X Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP7067b**Specification**

FN3X Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q9HA64](#)**FN3X Antibody (C-term) Blocking Peptide - 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 used to generate the antibody [AP7067b](/product/products/AP7067b) was selected from the C-term region of human FN3X. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

FN3X Antibody (C-term) Blocking Peptide - 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](http://www.uniprot.org/citations/14633848), PubMed:[15137908](http://www.uniprot.org/citations/15137908)). Ribuloselysine-3 phosphate and psicoselysine-3 phosphate adducts are unstable and decompose under physiological conditions (PubMed:[14633848](http://www.uniprot.org/citations/14633848), PubMed:[15137908](http://www.uniprot.org/citations/15137908)). Not able to phosphorylate fructoselysine (PubMed:[14633848](http://www.uniprot.org/citations/14633848)).

Tissue Location

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

FN3X Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

FN3X Antibody (C-term) Blocking Peptide - Images**FN3X Antibody (C-term) Blocking Peptide - Background**

Mammalian fructosamine-3-kinase (FN3K) catalyzes phosphorylation of fructosamines formed by glycation, the nonenzymatic reaction of glucose with primary amines. FN3K for example catalyzes transformation of fructoselysine (FL) residues on glycated proteins, to FL-3-phosphate (FL3P). This phosphorylation destabilizes FL and propels spontaneous decomposition, thereby reversing at an early stage the nonenzymatic glycation process. Phosphorylation of fructosamines may initiate metabolism of the modified amine and result in deglycation of glycated proteins. In mammals, FN3K has a closely related homologue, FN3KRP (FN3K-related protein), which in the human genome is located just 8 kb upstream of FN3K on chromosome 17q25.3 FN3KRP, which is 68% sequence identity with FN3K, is a deglycating enzyme which phosphorylates the third carbon of the sugar moiety of ketosamines, and may play a role in freeing proteins from ribulosamines or psicosamines. A deglycation system may be an important factor in protecting cells from the deleterious effects of nonenzymatic glycation, which appears to be an important factor in the pathogenesis of diabetic complications.

FN3X Antibody (C-term) Blocking Peptide - References

Conner, J.R., et al., Biochem. Biophys. Res. Commun. 323(3):932-936 (2004). Collard, F., et al., Diabetes 52(12):2888-2895 (2003). Collard, F., et al., Biochem. J. 382 (PT 1), 137-143 (2004) (): ().