

FN3KRP Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21419a

Product Information

Application WB, IHC-P, E **Primary Accession** Q9HA64

Reactivity Human, Mouse

Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG
Clone Names RB53014
Calculated MW 34412

Additional Information

Gene ID 79672

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

FN3K-related protein, FN3KRP

Target/Specificity This FN3KRP antibody is generated from a rabbit immunized with a KLH

conjugated synthetic peptide between 24-58 amino acids from human

FN3KRP.

Dilution WB~~1:1000-1:2000 IHC-P~~1:100~500 E~~Use at an assay dependent

concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

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

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions FN3KRP Antibody (N-Term) is for research use only and not for use in

diagnostic or therapeutic procedures.

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).

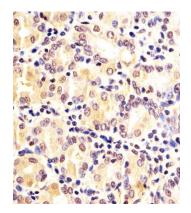
Background

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.

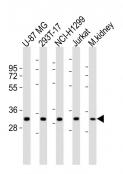
References

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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).

Images



AP21419a staining FN3KRP in human Stomach sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



All lanes: Anti-FN3KRP Antibody (N-Term) at 1:1000-1:2000 dilution Lane 1: U-87 MG whole cell lysates Lane 2: 293T-17 whole cell lysates Lane 3: NCI-H1299 whole cell lysates Lane 4: Jurkat whole cell lysates Lane 5: mouse kidney lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size: 34 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.