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FN3KRP Antibody (N-Term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5569

Product Information

Application	WB, IHC
Primary Accession	Q9HA64
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34412
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	79672
Antigen Region	24-58
Other Names	Ketosamine-3-kinase, 271-, Fructosamine-3-kinase-related protein, FN3K-RP, FN3K-related protein, FN3KRP
Dilution	WB~~1:2000 IHC~~1:100~500
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.
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).

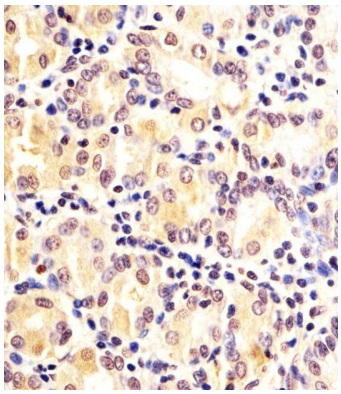
Background

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.

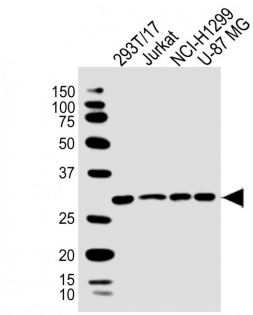
References

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).

Images



AW5569 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 1:2000 dilution Lane 1: 293T/17 whole cell lysate Lane 2: Jurkat whole cell lysate Lane 3: NCI-H1299 whole cell lysate Lane 4: U-87 MG whole cell lysate 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.