

GUK1 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58403

Product Information

Application	WB, IF, E
Primary Accession	Q16774
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	21726

Additional Information

Gene ID	2987
Other Names	Guanylate kinase, 2.7.4.8, GMP kinase, Guanylate kinase 1 {ECO:0000312 HGNC:HGNC:4693}, GUK1 {ECO:0000303 PubMed:8647247, ECO:0000312 HGNC:HGNC:4693}
Dilution	WB=1:500-2000,IF=1:100-500,ELISA=1:5000-10000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	GUK1 {ECO:0000303 PubMed:8647247, ECO:0000312 HGNC:HGNC:4693}
Function	Catalyzes the phosphorylation of GMP to GDP. Essential enzyme for recycling GMP and indirectly, cyclic GMP (cGMP) (PubMed: 31201273). Involved in the cGMP metabolism in photoreceptors (By similarity). It may also have a role in the survival and growth progression of some tumors (PubMed: 31201273). In addition to its physiological role, GUK1 is essential for converting prodrugs used for the treatment of cancers and viral infections into their pharmacologically active metabolites, most notably acyclovir, ganciclovir, and 6-thioguanine and its closely related analog 6-mercaptopurine (PubMed: 197968 , PubMed: 6248551 , PubMed: 6306664).
Cellular Location	Photoreceptor inner segment {ECO:0000250 UniProtKB:Q64520}. Cytoplasm, cytosol {ECO:0000250 UniProtKB:Q64520}. Note=Colocalizes with RD3 in photoreceptor inner segments and to a lesser extent in the outer plexiform layer. {ECO:0000250 UniProtKB:Q64520}
Tissue Location	Widely expressed..

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