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GRK7 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7731b

Product Information

Application	WB, IHC-P, E
Primary Accession	Q8WTQ7
Reactivity	Human
Predicted	Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB3975/3976
Calculated MW	62212
Antigen Region	508-538

Additional Information

Gene ID	131890
Other Names	G protein-coupled receptor kinase 7, G protein-coupled receptor kinase GRK7, GRK7, GPRK7
Target/Specificity	This GRK7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 508-538 amino acids from the C-terminal region of human GRK7.
Dilution	WB~~1:1000 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	GRK7 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	GRK7
Synonyms	GPRK7
Function	Retina-specific kinase involved in the shutoff of the photoresponse and

	adaptation to changing light conditions via cone opsin phosphorylation, including rhodopsin (RHO).
Cellular Location	Membrane {ECO:0000250|UniProtKB:Q8WMV0}; Lipid- anchor {ECO:0000250|UniProtKB:Q8WMV0}
Tissue Location	Retinal cones, outer and inner segments.

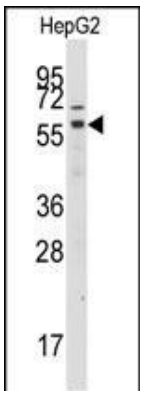
Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine kinase (TK) group is mainly involved in the regulation of cell-cell interactions such as differentiation, adhesion, motility and death. There are currently about 90 TK genes sequenced, 58 are of receptor protein TK (e.g. EGFR, EPH, FGFR, PDGFR, TRK, and VEGFR families), and 32 of cytosolic TK (e.g. ABL, FAK, JAK, and SRC families).

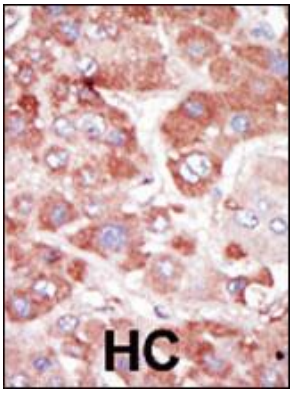
References

Weiss, E.R., et al., J. Neurosci. 21(23):9175-9184 (2001).
Chen, C.K., et al., Mol. Vis. 7, 305-313 (2001).

Images

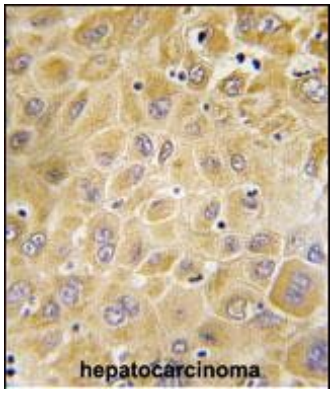


Western blot analysis of anti-GRK7 Antibody (C-term)(Cat.#AP7731b) in HepG2 cell line lysates (35ug/lane). GRK7(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with GRK7 Antibody



(C-term) (Cat.#AP7731b), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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