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YSK Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7956a

Product Information

Application	WB, IHC-P, E
Primary Accession	O00506
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1202
Calculated MW	48112
Antigen Region	325-356

Additional Information

Gene ID	10494
Other Names	Serine/threonine-protein kinase 25, Ste20-like kinase, Sterile 20/oxidant stress-response kinase 1, SOK-1, Ste20/oxidant stress response kinase 1, STK25, SOK1, YSK1
Target/Specificity	This YSK antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 325-356 amino acids from the C-terminal region of human YSK.
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 prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	YSK Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	STK25 (HGNC:11404)
Synonyms	SOK1, YSK1
Function	Oxidant stress-activated serine/threonine kinase that may play a role in the

response to environmental stress. Targets to the Golgi apparatus where it appears to regulate protein transport events, cell adhesion, and polarity complexes important for cell migration. Part of the striatin-interacting phosphatase and kinase (STRIPAK) complexes. STRIPAK complexes have critical roles in protein (de)phosphorylation and are regulators of multiple signaling pathways including Hippo, MAPK, nuclear receptor and cytoskeleton remodeling. Different types of STRIPAK complexes are involved in a variety of biological processes such as cell growth, differentiation, apoptosis, metabolism and immune regulation (PubMed:18782753).

Cellular Location Cytoplasm. Golgi apparatus. Note=Localizes to the Golgi apparatus

Tissue Location Ubiquitously expressed. Highest levels are found in testis, large intestine, brain and stomach followed by heart and lung

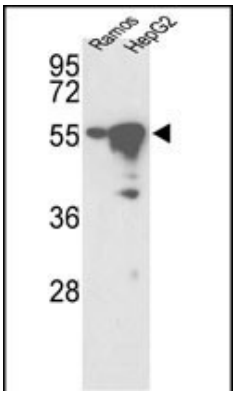
Background

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 STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

References

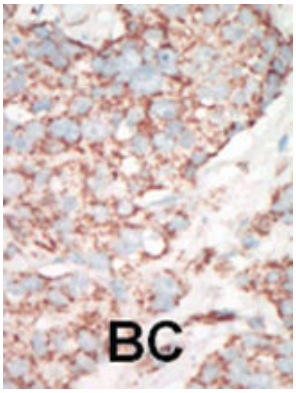
Osada, S., et al., Oncogene 14(17):2047-2057 (1997).
Pombo, C.M., et al., EMBO J. 15(17):4537-4546 (1996).

Images



Western blot analysis of hYSK-H340 (Cat.#AP7956a) in Ramos and HepG2 cell line lysates (35ug/lane). YSK (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.