

STK19 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7189b

Product Information

Application WB, E **Primary Accession** P49842 **Other Accession Q5ST75** Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB5625 **Calculated MW** 28465 278-308 **Antigen Region**

Additional Information

Gene ID 8859

Other Names Serine/threonine-protein kinase 19, Protein G11, Protein RP1, STK19, G11, RP1

Target/Specificity This STK19 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 278-308 amino acids from the

C-terminal region of human STK19.

Dilution WB~~1:1000 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 STK19 Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

Protein Information

Name WHR1 (HGNC:11398)

Function DNA-binding protein which is required for efficient transcription-coupled

nucleotide excision repair (TC-NER) (PubMed:38252411, PubMed:38890355,

PubMed:39353615, PubMed:39547223, PubMed:39547228,

PubMed:39547229). Acts as part of a TC-NER complex which assembles and

interacts with RNA polymerase II (RNAPII) when it stalls at DNA lesions (PubMed:<u>39547223</u>, PubMed:<u>39547228</u>, PubMed:<u>39547229</u>). TC-NER complex subunit UVSSA binds to the GTF2H1/p62 subunit of the TFIIH transcription factor complex, tethering TFIIH to the TC-NER complex (PubMed:39547228). WHR1/STK19 then interacts with the XPD helicase subunit of TFIIH which guides TFIIH to DNA downstream of the stalled RNAPII, ensuring DNA repair (PubMed:<u>39353615</u>, PubMed:<u>39547228</u>, PubMed:<u>39547229</u>). Directly interacts with RNAPII and also binds to downstream DNA (PubMed:39547229). Promotes the timely removal of DNA damage-stalled RNAPII, allowing downstream NER factors to access DNA lesions (PubMed:39547228. PubMed:39547229). Required for monoubiquitination of UVSSA (PubMed:39353615). Regulates repositioning and stabilization of UVSSA within the TC-NER complex (PubMed:39547223). Stimulates ubiquitination of RNAPII complex member RBP1 (PubMed: 39547223). Also binds to RNA and regulates the expression levels of many mRNAs (PubMed:38252411, PubMed:38890355).

Cellular Location [Isoform 4]: Nucleus [Isoform 1]: Nucleus. Cytoplasm

Tissue Location Monocytes, hepatocytes, epithelial cells, T- and B- lymphocytes.

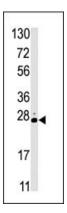
Background

SSTK19 is a serine/threonine kinase which localizes predominantly to the nucleus. Its specific function is unknown; it is possible that phosphorylation of this protein is involved in transcriptional regulation.

References

Gomez-Escobar, N., et al., J. Biol. Chem. 273(47):30954-30960 (1998). Yang, Z., et al., Genomics 53(3):338-347 (1998). Ulgiati, D., et al., Immunogenetics 43(4):250-252 (1996). Sargent, C.A., et al., Hum. Mol. Genet. 3(3):481-488 (1994). Shen, L., et al., J. Biol. Chem. 269(11):8466-8476 (1994).

Images



Western blot analysis of anti-STK19 Pab(Cat. #AP7189b) in HL60 cell line lysate (35ug/lane). STK19(arrow) was detected using the purified Pab.

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