Product Name: **Sam 68 Rabbit Polyclonal Antibody**
Catalog #: **APRab17585**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight	68kDa

Antigen Information

Gene Name	KHDRBS1
Alternative Names	KHDRBS1; SAM68; KH domain-containing; RNA-binding, signal transduction-associated protein 1; GAP-associated tyrosine phosphoprotein p62; Src-associated in mitosis 68 kDa protein; Sam68; p21 Ras GTPase-activating protein-associated p62; p68
Gene ID	10657.0
SwissProt ID	Q07666
Immunogen	The antiserum was produced against synthesized peptide derived from human Sam 68. AA range:96-145

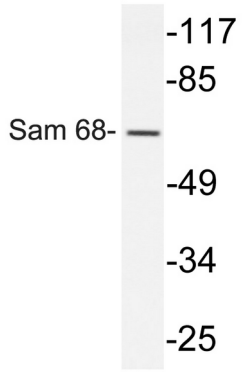
Background

This gene encodes a member of the K homology domain-containing, RNA-binding, signal transduction-associated protein family. The encoded protein appears to have many functions and may be involved in a variety of cellular processes, including alternative splicing, cell cycle regulation, RNA 3'-end formation, tumorigenesis, and regulation of human immunodeficiency virus gene expression. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2012],developmental stage:Isoform 3 is only expressed in growth-arrested cells.,domain:The KH domain is required for binding to RNA.,domain:The Pro-rich domains are flanked by Arg/Gly-rich motifs which can be asymmetric dimethylated on arginine residues to give the DMA/Gly-rich regions. Selective methlylation on these motifs can modulate protein-protein interactions.,function:Isoform 3, which is expressed in growth-arrested cells only, inhibits S phase.,function:Recruited and tyrosine phosphorylated by several receptor systems, for example the T-cell, leptin and insulin receptors. Once phosphorylated, functions as an adapter protein in signal transduction cascades by binding to SH2 and SH3 domain-containing proteins. Role in G2-M progression in the cell cycle. Represses CBP-dependent transcriptional activation apparently by competing with other nuclear factors for binding to CBP. Also acts as a putative regulator of mRNA stability and/or translation rates and mediates mRNA nuclear export.,PTM:Acetylated. Positively correlates with ability to bind RNA.,PTM:Arg-291, Arg-331 and Arg-346 are found to be also dimethylated, probably to asymmetric dimethylarginine.,PTM:Arginine methylation is required for nuclear localization. Also can affect interaction with other proteins. Inhibits interaction with Src-like SH3 domains, but not interaction with WW domains of WBP4/FBP21 AND FNBP4/FBP30.,PTM:Tyrosine phosphorylated by several non-receptor tyrosine kinases, for example LCK, FYN and JAK3. Negatively correlates with ability to bind RNA but required for many interactions with proteins.,sequence caution:Intron retention.,similarity:Belongs to the KHDRBS family.,similarity:Contains 1 KH domain.,subunit:Self-associates to form homooligomers when bound to RNA, oligomerization appears to be limited when binding to proteins. Interacts with CBL, KHDRBS3, LCK, GRB2, JAK3, PIK3R1, PLCG1, PTPN6, RASA1, RBMY1A1 and STAT3. Interacts with PRMT1. Binds the WW domains of WBP4/FBP21, FNBP4/FBP30 and the SH3 domain of FYN through the Arg/Gly-rich-flanked Pro-rich regions.,tissue specificity:Ubiquitously expressed in all tissue examined. Isoform 1 is expressed at lower levels in brain, skeletal muscle, and liver whereas isoform 3 is intensified in skeletal muscle and in liver.,

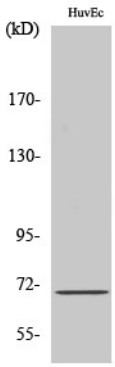
Research Area

Signal Transduction; Adapters; Transmembrane; Epigenetics and Nuclear Signaling; DNA / RNA; RNA Processing; Transcription; Other factors

Image Data



Western blot analysis of lysate from HUVEC cells, using Sam 68 antibody.



Western Blot analysis of various cells using Sam 68 Polyclonal Antibody