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GADD34 Polyclonal Antibody

Catalog # AP74083

Product Information

Application	WB
Primary Accession	O75807
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	73478

Additional Information

Gene ID	23645
Other Names	Protein phosphatase 1 regulatory subunit 15A (Growth arrest and DNA damage-inducible protein GADD34) (Myeloid differentiation primary response protein MyD116 homolog)
Dilution	WB~~WB 1:500-2000, ELISA 1:10000-20000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

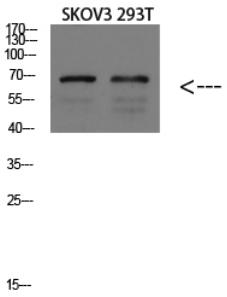
Name	PPP1R15A
Synonyms	GADD34
Function	Recruits the serine/threonine-protein phosphatase PPP1CA to prevents excessive phosphorylation of the translation initiation factor eIF-2A/EIF2S1, thereby reversing the shut-off of protein synthesis initiated by stress-inducible kinases and facilitating recovery of cells from stress (PubMed:26095357, PubMed:26742780). Down-regulates the TGF-beta signaling pathway by promoting dephosphorylation of TGFB1 by PP1 (PubMed:14718519). May promote apoptosis by inducing p53/TP53 phosphorylation on 'Ser-15' (PubMed:14635196). Plays an essential role in autophagy by tuning translation during starvation, thus enabling lysosomal biogenesis and a sustained autophagic flux (PubMed:32978159). Also acts a viral restriction factor by attenuating HIV-1 replication (PubMed:31778897). Mechanistically, mediates the inhibition of HIV-1 TAR RNA-mediated translation (PubMed:31778897).
Cellular Location	Endoplasmic reticulum membrane; Peripheral membrane protein;

Cytoplasmic side Mitochondrion outer membrane; Peripheral membrane protein; Cytoplasmic side. Note=Associates with membranes via an N-terminal amphipathic intramembrane region

Background

Recruits the serine/threonine-protein phosphatase PP1 to dephosphorylate the translation initiation factor eIF-2A/EIF2S1, thereby reversing the shut-off of protein synthesis initiated by stress-inducible kinases and facilitating recovery of cells from stress. Down-regulates the TGF-beta signaling pathway by promoting dephosphorylation of TGFB1 by PP1. May promote apoptosis by inducing TP53 phosphorylation on 'Ser-15'.

Images



Western blot analysis of MOUSE-BRAIN lysate, antibody was diluted at 1000. Secondary antibody was diluted at 1:20000

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