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EBP1 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2848a

Product Information

Application	IHC-P, FC, WB, E
Primary Accession	Q9UQ80
Other Accession	P50580
Reactivity	Human, Mouse
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	43787
Antigen Region	228-255

Additional Information

Gene ID	5036
Other Names	Proliferation-associated protein 2G4, Cell cycle protein p38-2G4 homolog, hG4-1, ErbB3-binding protein 1, PA2G4, EBP1
Target/Specificity	This EBP1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 228-255 amino acids from the Central region of human EBP1.
Dilution	IHC-P~~1:100~500 FC~~1:10~50 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 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	EBP1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PA2G4
Synonyms	EBP1

Function	May play a role in a ERBB3-regulated signal transduction pathway. Seems be involved in growth regulation. Acts a corepressor of the androgen receptor (AR) and is regulated by the ERBB3 ligand neuregulin-1/heregulin (HRG). Inhibits transcription of some E2F1- regulated promoters, probably by recruiting histone acetylase (HAT) activity. Binds RNA. Associates with 28S, 18S and 5.8S mature rRNAs, several rRNA precursors and probably U3 small nucleolar RNA. May be involved in regulation of intermediate and late steps of rRNA processing. May be involved in ribosome assembly. Mediates cap-independent translation of specific viral IRESs (internal ribosomal entry site) (By similarity). Regulates cell proliferation, differentiation, and survival. Isoform 1 suppresses apoptosis whereas isoform 2 promotes cell differentiation (By similarity).
Cellular Location	[Isoform 1]: Cytoplasm. Nucleus, nucleolus Note=Translocates to the nucleus upon treatment with HRG Phosphorylation at Ser-361 by PKC/PRKCD regulates its nucleolar localization.
Tissue Location	Isoform 2 is undetectable whereas isoform 1 is strongly expressed in cancer cells (at protein level). Isoform 1 and isoform 2 are widely expressed, including heart, brain, lung, pancreas, skeletal muscle, kidney, placenta and liver

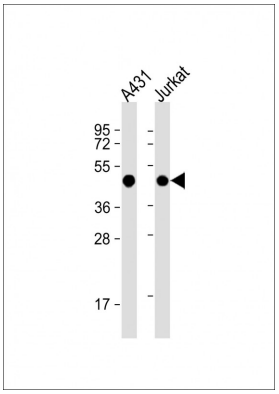
Background

PA2G4 is an RNA-binding protein that is involved in growth regulation. This protein is present in pre-ribosomal ribonucleoprotein complexes and may be involved in ribosome assembly and the regulation of intermediate and late steps of rRNA processing. This protein can interact with the cytoplasmic domain of the ErbB3 receptor and may contribute to transducing growth regulatory signals. This protein is also a transcriptional co-repressor of androgen receptor-regulated genes and other cell cycle regulatory genes through its interactions with histone deacetylases. This protein has been implicated in growth inhibition and the induction of differentiation of human cancer cells.

References

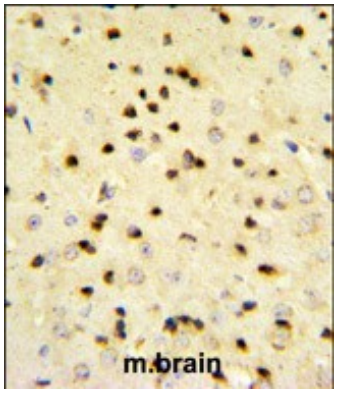
Zhang,Y., Mol. Cancer Ther. 7 (10), 3176-3186 (2008)
Zhang,Y., Cancer Lett. 265 (2), 298-306 (2008)
Okada,M., J. Biol. Chem. 282 (50), 36744-36754 (2007)

Images

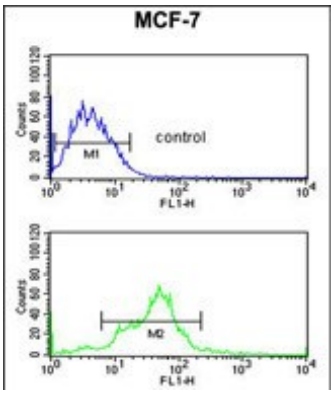


All lanes : Anti-EBP1 Antibody (Center) at 1:1000 dilution Lane 1: A431 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 44 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

EBP1 Antibody (Center) (Cat. #AP2848a) IHC analysis in formalin fixed and paraffin embedded mouse brain tissue followed by peroxidase conjugation of the secondary



antibody and DAB staining. This data demonstrates the use of the EBP1 Antibody (Center) for immunohistochemistry. Clinical relevance has not been evaluated.



EBP1 Antibody (Center) (Cat. #AP2848a) flow cytometric analysis of MCF-7 cells (bottom histogram) compared to a negative control cell (top histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

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