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Anti-EBP1 Picoband Antibody

Catalog # ABO10259

Product Information

Application	WB, IHC-P
Primary Accession	Q9UQ80
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Proliferation-associated protein 2G4(PA2G4) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

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
Calculated MW	43787
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 □g/ml, Mouse, Rat, Human, By Heat Western blot, 0.1-0.5 □g/ml, Human, Mouse, Rat
Subcellular Localization	Isoform 1: Cytoplasm . Nucleus, nucleolus . Tranlocates to the nucleus upon treatment with HRG. Phosphorylation at Ser-361 by PKC/PRKCD regulates its nucleolar localization. .
Tissue Specificity	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. .
Source	Eukaryota
Protein Name	Proliferation-associated protein 2G4
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human EBP1 (138-178aa RKADVIKAAHLCAEAALRLVKPGNQNTQVTEAWNKVAHSFN), identical to the related mouse and rat sequences.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Protein Information

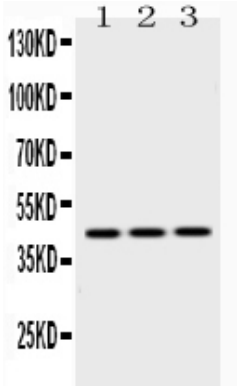
Name	PA2G4
Synonyms	EBP1
Function	May play a role in a ERBB3-regulated signal transduction pathway. Seems be involved in growth regulation. Acts a corepressor of the androgen receptor (AR) and is regulated by the ERBB3 ligand neuregulin-1/heregulin (HRG). Inhibits transcription of some E2F1- regulated 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

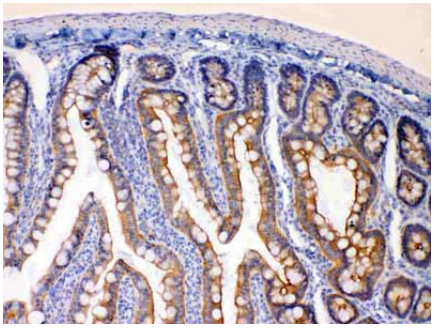
Background

Proliferation-associated protein 2G4 (PA2G4), also known as ErbB3-binding protein 1 (EBP1), is a protein that in humans is encoded by the PA2G4 gene. This gene encodes 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 corepressor of androgen receptor-regulated genes and other cell cycle regulatory genes through its interactions with histone deacetylases.

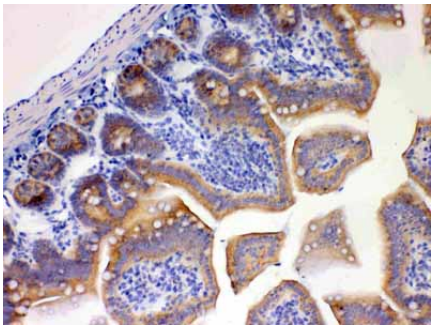
Images

Western blot analysis of EBP1 expression in rat liver extract (lane 1), NIH3T3 whole cell lysates (lane 2) and HEPG2 whole cell lysates (lane 3). EBP1 at 43KD was detected using rabbit anti- EBP1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10259) at 0.5 □¼g/mL. The blot was developed using chemiluminescence (ECL) method .

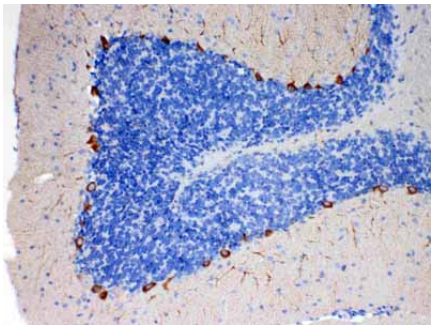




EBP1 was detected in paraffin-embedded sections of rat intestine tissues using rabbit anti- EBP1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10259) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .



EBP1 was detected in paraffin-embedded sections of mouse intestine tissues using rabbit anti- EBP1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10259) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .



EBP1 was detected in paraffin-embedded sections of mouse brain tissues using rabbit anti- EBP1 Antigen Affinity purified polyclonal antibody (Catalog # ABO10259) at 1 □¼g/mL. The immunohistochemical section was developed using SABC method .