

EBP1 Protein, Human (His)

Cat. No.:	HY-P75726
Synonyms:	Proliferation-associated protein 2G4; hG4-1; ErbB3-binding protein 1; PA2G4
Species:	Human
Source:	E. coli
Accession:	Q9UQ80-1 (S2-D394)
Gene ID:	5036
Molecular Weight:	Approximately 45 kDa

PROPERTIES

AA Sequence

SGEDEQEQEQT	IAEDLVVTKY	KMGGDIANRV	LRSLVEASSS
GVSVLSLCEK	GDAMIMEETG	KIFKKEKEMK	KGIAFPTSIS
VNNCVCHFSP	LKSDQDYILK	EGDLVKIDLK	VHVDGFIANV
AHTFVVDVAQ	GTQVTGRKAD	VIKAAHLCAE	AALRLVKPGN
QNTQVTEAWN	KVAHSFNCTP	IEGMLSHQLK	QHVIDGEKTI
IQNPTDQQKK	DHEKAEFEVH	EVYAVDVLVS	SGEGKAKDAG
QRTTIYKRDP	SKQYGLKMKT	SRAFFSEVER	RFDAMPFTLR
AFEDEKKARM	GVVECAKHEL	LQPFNVLYEK	EGEFVAQFKF
TVLLMPNGPM	RITSGPFEPD	LYKSEMEVQD	AELKALLQSS
ASRKTQKKKK	KKASKTAENA	TSGETLEENE	AGD

Appearance

Lyophilized powder

Formulation

Lyophilized from a 0.2 µm filtered solution of 50 mM Tris-HCL, 300 mM NaCl, pH 8.0.

Endotoxin Level

<1 EU/µg, determined by LAL method.

Reconstitution

It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH₂O. For long term storage it is recommended to add a carrier protein (0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose).

Storage & Stability

Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping

Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

The EBP1 protein is implicated in playing a role in an ERBB3-regulated signal transduction pathway and is associated with growth regulation. It acts as a corepressor of the androgen receptor (AR) and is modulated by the ERBB3 ligand neuregulin-

1/hereregulin (HRG). Furthermore, EBP1 inhibits transcription of some E2F1-regulated promoters, potentially by recruiting histone acetylase (HAT) activity. It exhibits RNA-binding capabilities and associates with various mature and precursor rRNAs, suggesting involvement in the regulation of intermediate and late steps of rRNA processing and ribosome assembly. Additionally, EBP1 mediates cap-independent translation of specific viral internal ribosomal entry sites (IRESs). Functionally, it plays a role in regulating cell proliferation, differentiation, and survival, with isoform-specific effects on apoptosis suppression (isoform 1) and cell differentiation promotion (isoform 2). The protein interacts with various partners, including the cytoplasmic domain of ERBB3, and exhibits dynamic associations with AR, NCL/nucleolin, HDAC2, RB1, AKT1, RNF20, HUWE1, and DNAJC21, highlighting its versatility in engaging with diverse cellular components and participating in intricate molecular processes.

Caution: Product has not been fully validated for medical applications. For research use only.

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