

TCF12 Rabbit pAb

Catalog # AP97661

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q99081
Other Accession	Q99081
Host	Rabbit
Clonality	Polyclonal
Calculated MW	72965
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human TCF12
Epitope Specificity	51-150/682
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 1 bHLH (basic helix-loop-helix) domain.
SUBUNIT	Binds specifically to oligomers of E-box motifs. May play important roles during development of the nervous system as well as in other organ systems.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Differentiation of myogenic cells is regulated by multiple positively and negatively acting factors. One well characterized family of helix-loop-helix (HLH) proteins known to play an important role in the regulation of muscle cell development includes Myo D, myogenin, Myf-5 and Myf-6 (also designated MRF-4 or herculin). Myo D transcription factors form heterodimers with products of a more widely expressed family of bHLH genes, the E family, which consists of at least three distinct genes: E2A, IF2 and HEB. Myo D-E heterodimers bind avidly to consensus (CANNTG) E box target sites that are functionally important elements in the upstream regulatory sequences of many muscle-specific terminal differentiation genes. Both homo- and hetero-oligomers of these proteins are able to distinguish very closely related E box proteins and are believed to play important roles in lineage specific gene expression.

Additional Information

Gene ID	6938
Other Names	CRS3; HEB; HH26; HTF4; HsT17266; TCF-12; bHLHb20; p64; HTF4_HUMAN; TCF12; Class B basic helix-loop-helix protein 20 (bHLHb20); DNA-binding protein HTF4; E-box-binding protein; Transcription factor HTF-4; transcription factor 12; helix-loop-helix transcription factor 4
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	TCF12
Synonyms	BHLHB20, HEB, HTF4
Function	Transcriptional regulator. Involved in the initiation of neuronal differentiation. Activates transcription by binding to the E box (5'-CANNTG-3') (By similarity). May be involved in the functional network that regulates the development of the GnRH axis (PubMed: 32620954).
Cellular Location	Nucleus.
Tissue Location	Expressed in several tissues and cell types including skeletal muscle, thymus, and a B-cell line

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