10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# TCF12 Rabbit pAb

Catalog # AP97661

## Product Information

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| **Application** | IHC-P, IHC-F, IF |
| **Primary Accession** | Q99081 |
| **Other Accession** | Q99081 |
| **Reactivity** | Rat |
| **Predicted** | Human, Mouse, Rabbit, Zebrafish, Horse, Sheep |
| **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

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| **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 |

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| **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

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| **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'.