

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects human TCF-12/HTF4 in direct ELISAs. In direct ELISAs, 75%-100% cross-reactivity with recombinant human (rh) TCF-3 and no cross-reactivity with rhTCF-1, -2, -4, or rhStathmin-2 is observed.                                                                        |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>1</sub> Clone # 690129                                                                                                                                                                                                                            |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | <i>E. coli</i> -derived recombinant human TCF-12/HTF4<br>Met108-Glu521<br>Accession # Q99081                                                                                                                                                                                |
| <b>Conjugate</b>          | Alexa Fluor 647<br>Excitation Wavelength: 650 nm<br>Emission Wavelength: 668 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Immunocytochemistry** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

## BACKGROUND

TCF-12 (transcription factor 12), also called HTF4, bHLHb20 and HEB, is a 682 amino acid (aa) DNA binding protein of the E protein family of helix-loop-helix (HLH) transcription factors. E proteins, including TCF-12 and E2A, mediate lymphocyte differentiation and also function in neurogenesis. Homo-oligomerization is required for activity; hetero-oligomers are also formed. The region of human TCF-12 used as an immunogen excludes the HLH domain and shares 94% aa sequence identity with mouse and rat TCF-12. Potential isoforms of 706 and 648 aa contain an insertion of 24 aa after aa 396, while isoforms of 648, 624 and 512 aa show alternate N-terminal sequences that merge with the 682 aa form at aa 75, 75 and 194, respectively.

## PRODUCT SPECIFIC NOTICES

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