

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human TCF7L1 in direct ELISAs. In direct ELISAs, 5-10% cross-reactivity with recombinant human (rh) TCF-4 (aa 102-516) and rhTCF-12 is observed. No cross-reactivity with rhTCF7L1 (aa 151-320), rhTCF7L2, rhTCF-1, -2, -3, -4 (aa 241-365), rhLEF-1, or recombinant mouse TCF-1 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 622782
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E.coli</i> -derived recombinant human TCF7L1 Lys429-Ser581 Accession # Q9HCS4
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

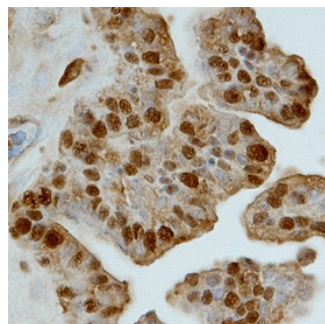
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunohistochemistry</b>	8-25 µg/mL	See Below

## DATA

### Immunohistochemistry



**TCF7L1 in Human Brain.** TCF7L1 was detected in immersion fixed paraffin-embedded sections of human brain (hippocampus) using Human TCF7L1 Monoclonal Antibody (Catalog # MAB61161) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 mg/mL.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Transcription factor 7-like 1 (TCF7L1; also HMG box transcription factor 3, TCF-3) is a 63 kDa member of the TCF/LEF family of proteins. Human TCF7L1 is 588 amino acids (aa) in length and contains one HMG box DNA-binding domain (aa 346-414). Human TCF7L1 shares 95% aa sequence identity with mouse TCF7L1. TCF7L1 is expressed in hair follicles and skin keratinocytes and at lower levels in stomach epithelium. Functionally, it participates in the Wnt signaling pathway. TCF7L1 binds to DNA and acts as a repressor in the absence of CTNNB1 and as an activator in its presence. TCF7L1 is also necessary for the terminal differentiation of epidermal cells, the formation of keratohyalin granules, and the development of the barrier function of the epidermis.