

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TCF7/TCF1 in ELISA and Western Blot.
Source	Monoclonal Rat IgG _{2B} Clone # 812145
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant mouse TCF7/TCF1 Gly61-Gly116 Accession # Q00417
Formulation	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.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p> <p>Detection of Mouse TCF7/TCF1 by Western Blot. Western blot shows lysates of EL-4 mouse lymphoblast cell line and mouse thymus tissue. PVDF membrane was probed with 1 µg/mL of Rat Anti-Mouse TCF7/TCF1 Monoclonal Antibody (Catalog # MAB8224) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). Specific bands were detected for TCF7/TCF1 at approximately 30-50 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Intracellular Staining by Flow Cytometry</p> <p>Detection of TCF7/TCF1 in EL-4 Mouse Cell Line by Flow Cytometry. EL-4 mouse lymphoblast cell line was stained with Rat Anti-Mouse TCF7/TCF1 Monoclonal Antibody (Catalog # MAB8224, filled histogram) or isotype control antibody (Catalog # MAB0061, open histogram), followed by Allophycocyanin-conjugated Anti-Rat IgG Secondary Antibody (Catalog # F0113). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

TCF7 (Transcription factor 7), also called TCF1 (T cell factor 1) is a member of the lymphoid enhancer binding factor family of proteins that is expressed in thymocytes and mature T cells. In resting cells, TCF family members are transcriptional repressors, and are 25-32 kDa in size. Following activation, the large TCF7/TCF1 isoform (isoform 2, chosen as 'canonical') predominates (419 amino acids, 42-50 kDa), and serves a transcriptional activator function. The use of an alternate start site at Met116 seems to characterize repressor isoforms. Within aa 61-116 of the large form, mouse TCF7/TCF1 shares 77% aa sequence identity with human TCF7/TCF1.