

Mouse TCF-3/E2A Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF7650

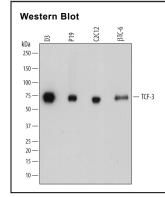
DESCRIPTION	
Species Reactivity	Mouse
Specificity	Detects mouse TCF-3/E2A in direct ELISAs and Western blots.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	E. coli-derived recombinant mouse TCF-3/E2A Asn33-Arg159 Accession # P15806
Formulation	Lyophilized from a 0.2 µm 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	0.5 μg/mL	See Below

DATA



Detection of Mouse TCF-3/E2A by Western Blot. Western blot shows lysates of D3 mouse embryonic stem cell line, P19 mouse embryonal carcinoma cell line, C2C12 mouse myoblast cell line, and β TC-6 mouse beta cell insulinoma cell line, PVDF membrane was probed with 0.5 µg/mL of Sheep Anti-Mouse TCF-3/E2A Antigen Affinity-purified Polyclonal Antibody (Catalog # AF7650) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). Specific bands were detected for TCF-3/E2A at approximately 70-75 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

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Reconstitution Sterile PBS to a final concentration of 0.2 mg/mL.

ShippingThe 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.

- 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

TCF-3 (Transcription factor 3; also Transcription factor A1 and E2A/alpha plus E12/E47) is a 68-75 kDa nuclear class I member of the bHLH family of molecules. It should not be confused with TCF-3, otherwise known as TCF7-L1, an epidermis-associated β-catenin regulator. TCF-3 is ubiquitously expressed, and generally serves as a transcriptional regulator. It is able to form covalent homodimers, and following phosphorylation, heterodimers with tissue-specific class II bHLH factors, thus impacting the proliferation and differentiation of select cell types. While heterodimers, and possibly homodimers, activate genes by binding to E boxes, heterodimers involving Id proteins are gene repressors. Mouse TCF-3/E12 is 651 amino acids (aa) in length. It contains one Leu-zipper motif (aa 387-422) plus a bHLH domain (aa 544-604). TCF-3 contains at least three potential Ser phosphorylation sites. There is one alternative splice form that is termed E47 and shows a 69 as substitution for aa 527-598. This involves the bHLH domain, and it is believed that each splice form has a distinct function(s). Both splice forms (E12 and E47) do occur simultaneously in the same cell type. Over aa 33-159, mouse TCF-3 shares 94% and 75% aa sequence identity with rat and human TCF-3, respectively.

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