Datasheet for ABIN967449

anti-TFE3 antibody

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Overview

Quantity:	0.1 mg
Target:	TFE3
Reactivity:	Human, Mouse
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This TFE3 antibody is un-conjugated
Application:	Western Blotting (WB), Immunoprecipitation (IP)

Product Details

Brand:	BD Pharmingen™
Immunogen:	TFE3-L Protein
Clone:	G138-312
Isotype:	IgG1
Characteristics:	1. Since applications vary, each investigator should titrate the reagent to obtain optimal results. 2. Please refer to us for technical protocols. 3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	TFE3
Alternative Name:	TFE3 (TFE3 Products)
Background:	TFE3 is a ubiquitously expressed 50 kDa transcription factor containing both basic helix-loop-helix (bHLH) and leucine zipper (ZIP) motifs. It was initially identified as a protein which bound to the µE3 site in the immunoglobulin heavy chain enhancer. In addition, it binds to the MLTF/USF site in the adenovirus major late promoter. Upon binding as a dimer, it induces a minor groove-oriented bend in the DNA, similar to other HLH proteins such as TFEB, USF, myc, and max. Binding results in transcriptional activation and is mediated through the basic region located just N-terminal to the HLH domain. Clone G138-312 recognizes TFE3. The antibody was raised against a bacterially expressed TFE3-L protein consisting of 327 amino acids encoded by nucleotides 361-2469 of the cloned cDNA.
Molecular Weight:	50 kDa

Application Details

Application Notes:	Applications include western blot analysis (0.25-1.0 µg/ml). WI-38 cells are suggested as a positive control. Other applications include gel shift (supershifts) and immunoprecipitation, which are not routinely tested. The antibody has been used to detect in vitro translated TFE3-L and TFE3-L, expressed as a recombinant protein in bacteria. In gel shift assays, using µE3 as a probe, this antibody supershifts the complex.
Comment:	Related Products: ABIN967389, ABIN968553
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.

Publications

Product cited in:

Fisher, Parent, Sharp: "Myc/Max and other helix-loop-helix/leucine zipper proteins bend DNA toward the minor groove." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 89, Issue 24, pp. 11779-83, (1993) (PubMed).

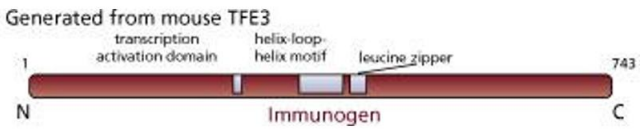
Zhao, Zhao, Zhou, Mattei, de Crombrugghe: "TFEC, a basic helix-loop-helix protein, forms heterodimers with TFE3 and inhibits TFE3-dependent transcription activation." in: **Molecular and cellular biology**, Vol. 13, Issue 8, pp. 4505-12, (1993) (PubMed).

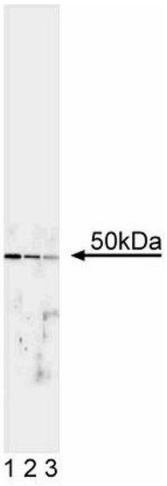
Beckmann, Su, Kadesch: "TFE3: a helix-loop-helix protein that activates transcription through the immunoglobulin enhancer muE3 motif." in: **Genes & development**, Vol. 4, Issue 2, pp. 167-79, (1990) (PubMed).

Murre, McCaw, Baltimore: "A new DNA binding and dimerization motif in immunoglobulin enhancer binding, daughterless, MyoD, and myc proteins." in: **Cell**, Vol. 56, Issue 5, pp. 777-83, (1989) (PubMed).

Images

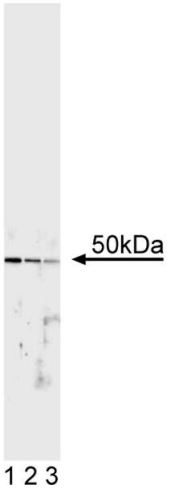
Image 1.





Western Blotting

Image 2. Western blot analysis of TFE3. Lysate from WI-38 cells was probed with anti- TFE3 (clone G138-312) at concentrations of 1.0 (lane 1), 0.5 (lane 2), and 0.25 myg/ml (lane 3). TFE3 is identified as a band of 50 kDa.



Western Blotting

Image 3.

