**XBP-1 (F-4): sc-8015**

**BACKGROUND**

The X-box binding protein-1 (XBP-1 or hXBP-1), also designated tax-responsive element-binding protein 5 (TREB5) in mouse and human, or hepatocarcinogenesis-related transcription factor (HTF) in rat, belongs to the basic region/leucine zipper (bZIP) family of transcription factors. XBP-1 was first characterized as a protein that binds to the HLA-DRα promoter in B cells. XBP-1 recognizes the cAMP responsive element (CRE) in enhancers of human T cell leukemia virus and major histocompatibility complex class II genes and activates transcription of these genes. It is expressed at high levels in developing bone and its levels are modulated during osteoblast development, suggesting a role in regulation of expression of osteoblast-specific genes. In addition to binding to CRE sequences, XBP-1 has been shown to bind to TPA response elements (TREs).

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: XBP1 (human) mapping to 22q12.1; Xbp1 (mouse) mapping to 11 A1.

**SOURCE**

XBP-1 (F-4) is a mouse monoclonal antibody raised against amino acids 76-263 mapping at the C-terminus of XBP-1 (X-box binding protein-1) of mouse origin.

**PRODUCT**

Each vial contains 200 μg IgG, kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-8015 X, 200 μg/0.1 ml.

XBP-1 (F-4) is available conjugated to agarose (sc-8015 AC), 500 μg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-8015 HRP), 200 μg/ml, for WB, IHC(P) and ELISA; to either phycocyanin (sc-8015 PE), fluorescein (sc-8015 FITC), Alexa Fluor® 488 (sc-8015 AF488), Alexa Fluor® 546 (sc-8015 AF546), Alexa Fluor® 594 (sc-8015 AF594) or Alexa Fluor® 647 (sc-8015 AF647), 200 μg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-8015 AF680) or Alexa Fluor® 790 (sc-8015 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

XBP-1 (F-4) is recommended for detection of XBP-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for XBP-1 siRNA (h): sc-38627, XBP-1 siRNA (m): sc-38628, XBP-1 shRNA Plasmid (h): sc-38627-SH, XBP-1 shRNA Plasmid (m): sc-38628-SH, XBP-1 shRNA (h) Lentiviral Particles: sc-38627-V and XBP-1 shRNA (m) Lentiviral Particles: sc-38628-V.

XBP-1 (F-4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of XBP-1U isoform: 29 kDa.
Molecular Weight (predicted) of XBP-1S isoform: 40 kDa.
Molecular Weight (observed) of XBP-1U isoform: 24-32 kDa.
Molecular Weight (observed) of XBP-1S isoform: 54-56 kDa.

Positive Controls: c4 whole cell lysate: sc-364186, H4 cell lysate: sc-2408 or T-47D cell lysate: sc-2293.

**DATA**

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.