**BACKGROUND**

The brain-expressed X-linked (Bex) family of proteins is expressed in the central nervous system, with highest levels detected in cerebellum, temporal lobe and pituitary tissues. Bex1 plays an important role in neuronal differentiation in response to nerve growth factor (NGF), as well as in cell cycle progression. Bex1 is a highly ubiquitinated protein and acts as a link between the cell cycle and neurotrophic factor signaling. Bex2 interacts with LMO2, thereby regulating the transcriptional activity of a DNA-binding complex. Bex1 and Bex2 are widely expressed outside of the central nervous system with high expression in the liver. Bex1 and Bex2 shuttle between the cytoplasm and the nucleus. Though the role of Bex1 is largely unknown, it may function by coordinating internal cellular states with the ability of cells to respond to external signals.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: BEX1/BEX2 (human) mapping to Xq22.1; Bex1/Bex2 (mouse) mapping to X F1.

**SOURCE**

Bex1/2 (D-6) is a mouse monoclonal antibody raised against amino acids 39-110 mapping within an internal region of Bex1 of human origin.

**PRODUCT**

Each vial contains 200 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Bex1/2 (D-6) is available conjugated to agarose (sc-376342 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-376342 HRP), 200 µg/ml, for WB, (HCP) and ELISA; to either phycoerythrin (sc-376342 PE), fluorescein (sc-376342 FITC), Alexa Fluor® 488 (sc-376342 AF488), Alexa Fluor® 546 (sc-376342 AF546), Alexa Fluor® 594 (sc-376342 AF594) or Alexa Fluor® 647 (sc-376342 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-376342 AF680) or Alexa Fluor® 790 (sc-376342 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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**RESEARCH USE**

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

**APPLICATIONS**

Bex1/2 (D-6) is recommended for detection of Bex1 and Bex2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Molecular Weight of Bex1/2: 15 kDa.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG1 BP-HRP: sc-516102 or m-IgG1 BP-HRP (Cruz Marker): sc-516102 CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-204B. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG1 BP-FITC: sc-516140 or m-IgG1 BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG1 BP-HRP: sc-516102 with DAB, 50X: sc-24982 and ImmunohistoMount: sc-45086, or Organo/Limonene Mount: sc-45087.

**DATA**

![Western blot analysis of Bex2 expression in non-transfected](https://example.com/blot.jpg)

**SELECT PRODUCT CITATIONS**


**STORAGE**

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