

p22HBP (h3): 293T Lysate: sc-111835

BACKGROUND

p22HBP, also known as HEBP1 (heme binding protein 1), HBP or HEBP, is a 189 amino acid intracellular tetrapyrrole-binding protein that assists in prevention of cellular toxicity by removing free porphyrinogens from the cell. Existing as a monomer, p22HBP localizes to cytoplasm and contains a 21 amino acid chemoattractant within its N-terminus that functions as a natural ligand for FPR3. p22HBP is a member of the HEBP family and binds N-methylprotoporphyrin and metalloporphyrins with similar affinity to porphyrinogens. The gene encoding p22HBP maps to human chromosome 12, which encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

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2. Jacob Blackmon, B., et al. 2002. Characterization of a human and mouse tetrapyrrole-binding protein. *Arch. Biochem. Biophys.* 407: 196-201.
3. Dias, J.S., et al. 2005. ¹H, ¹⁵N and ¹³C resonance assignments of the heme-binding protein murine p22HBP. *J. Biomol. NMR* 32: 338.
4. Migeotte, I., et al. 2005. Identification and characterization of an endogenous chemotactic ligand specific for FPRL2. *J. Exp. Med.* 201: 83-93.
5. Dias, J.S., et al. 2006. The first structure from the SOUL/HBP family of heme-binding proteins, murine P22HBP. *J. Biol. Chem.* 281: 31553-31561.
6. Gell, D.A., et al. 2006. A novel haem-binding interface in the 22 kDa haem-binding protein p22HBP. *J. Mol. Biol.* 362: 287-297.
7. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 605826. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

Genetic locus: HEBP1 (human) mapping to 12p13.1.

PRODUCT

p22HBP (h3): 293T Lysate represents a lysate of human p22HBP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

APPLICATIONS

p22HBP (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive p22HBP antibodies. Recommended use: 10-20 µl per lane.

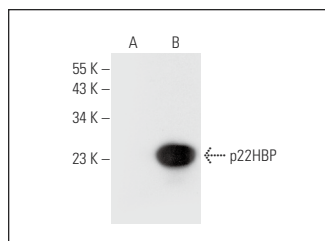
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

p22HBP (E-3): sc-398750 is recommended as a positive control antibody for Western Blot analysis of enhanced human p22HBP expression in p22HBP transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

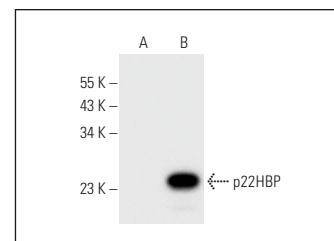
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-2048.

DATA



p22HBP (E-3): sc-398750. Western blot analysis of p22HBP expression in non-transfected: sc-117752 (A) and human p22HBP transfected: sc-111835 (B) 293T whole cell lysates.



p22HBP (B-3): sc-398612. Western blot analysis of p22HBP expression in non-transfected: sc-117752 (A) and human p22HBP transfected: sc-111835 (B) 293T whole cell lysates.

RESEARCH USE

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