SANTA CRUZ BIOTECHNOLOGY, INC.

HABP2 light chain (Q-13): sc-131548

BACKGROUND

The hyaluronan-binding protein 2 (HABP2), also designated plasma hyaluronan-binding protein (PHBP) or factor VII-activating protease, belongs to the peptidase S1 family and contains three EGF-like domains, one kringle domain and one peptidase S1 domain. HABP2 is a heterodimer that contains a heavy chain of 50 kDa and a light chain of 27 kDa, which are linked by a disulfide bond. HABP2 is ubiquitously expressed and acts as a serine protease with fibrinogen and fibronectin being the major substrates. HABP2 has been shown to cleave the α-chain at multiple sites and the β-chain between lysine53 and lysine54, but not the γ-chain of fibrinogen. Overexpression of HABP2 has been shown to occur in lung adenocarcinomas and may be a useful biomarker for that type of cancer.

REFERENCES

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2. Sumiya, J., et al. 1997. Isolation and characterization of the plasma hyaluronan-binding protein (PHBP) gene (HABP2). J. Biochem. 122: 983-990.
3. Römisch, J., et al. 1999. The FVII activating protease cleaves single-chain plasminogen activators. Haemostasis 29: 292-299.
4. Choi-Miura, N.H., et al. 2001. Identification of the substrates for plasma hyaluronan binding protein. Biol. Pharm. Bull. 24: 140-143.
5. Wang, K.K., et al. 2002. Novel candidate tumor marker genes for lung adenocarcinoma. Oncogene 21: 7598-7604.
6. Willeit, J., et al. 2003. Marburg I polymorphism of factor VII—activating protease: a prominent risk predictor of carotid stenosis. Circulation 107: 667-670.
7. Gungormus, M., et al. 2008. Regulation of *in vitro* calcium phosphate mineralization by combinatorially selected hydroxyapatite-binding peptides. Biomacromolecules 9: 966-973.
8. Mambetsariev, N., et al. 2010. Hyaluronic acid binding protein 2 is a novel regulator of vascular integrity. Arterioscler. Thromb. Vasc. Biol. 30: 483-490.

CHROMOSOMAL LOCATION

Genetic locus: HABP2 (human) mapping to 10q25.3; Habp2 (mouse) mapping to 19 D2.

SOURCE

HABP2 light chain (Q-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HABP2 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131548 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HABP2 light chain (Q-13) is recommended for detection of Precursor and HABP2 light chain of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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); non cross-reactive with HABP2 heavy chain.

HABP2 light chain (Q-13) is also recommended for detection of Precursor and HABP2 light chain in additional species, including equine and canine.

Suitable for use as control antibody for HABP2 siRNA (h): sc-90485, HABP2 siRNA (m): sc-145887, HABP2 shRNA Plasmid (h): sc-90485-SH, HABP2 shRNA Plasmid (m): sc-145887-SH, HABP2 shRNA (h) Lentiviral Particles: sc-90485-V and HABP2 shRNA (m) Lentiviral Particles: sc-145887-V.

Molecular Weight of HABP2 light chain: 63 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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