HABP2 light chain (P-14): sc-131547



The Power to Overtion

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

- Choi-Miura, N.H., et al. 1996. Purification and characterization of a novel hyaluronan-binding protein (PHBP) from human plasma: it has three EGF, a kringle and a serine protease domain, similar to hepatocyte growth factor activator. J. Biochem. 119: 1157-1165.
- 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.
- 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.
- Willeit, J., et al. 2003. Marburg I polymorphism of factor VII—activating protease: a prominent risk predictor of carotid stenosis. Circulation 107: 667-670.
- 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 (P-14) 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-131547 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HABP2 light chain (P-14) is recommended for detection of Precursor and HABP2 light chain of mouse, rat 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 (P-14) is also recommended for detection of Precursor and HABP2 light chain in additional species, including canine, bovine and porcine.

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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 **Europe** +00800 4573 8000 49 6221 4503 0 **www.scbt.com**