

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human HGF Activator in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 5% cross-reactivity with recombinant mouse HGF Activator is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human HGF Activator Gln36-Ser655 Accession # Q04756.1
Conjugate	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide
*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot	Optimal dilution of this antibody should be experimentally determined.
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.
Immunoprecipitation	Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Hepatocyte Growth Factor Activator (HGFA) is a serine endopeptidase that cleaves at the peptide bond between Arg494 and Val495 of single-chain human HGF precursor, generating the active heterodimer (1). HGFA is produced and secreted by the liver and normally circulates in the blood as an inactive zymogen (2, 3). The zymogen has a weak affinity for heparin but acquires a strong affinity for heparin upon activation that is linked to blood coagulation. This property may ensure the local action of this enzyme at the site of tissue injury (3). Human HGFA precursor (655 amino acid residues) contains several predicted domains including a signal peptide (residues 1-30), a propeptide (residues 31-372), and a mature and active form (residues 373-655) that is further processed into a short chain (residues 373-407) and a long chain (residues 408-655). The short chain and the long chain (catalytic domain) may form a disulfide bond linked dimer. HGFA can be activated by thrombin (R&D Systems, Catalog # 1473-SE) or thermolysin (R&D Systems, Catalog # 3097-ZN) (4). The active protease can be inhibited by HGFA inhibitors (HAIs). Two HAIs, HAI-1 and HAI-2, are known in mouse and human. HAI-1 is not only an inhibitor, but also a specific acceptor of active HGFA, acting as a reservoir of this enzyme on the cell surface (5).

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc., and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.