

Heparanase-1 Active Protein | HPSE active protein

Recombinant Human Heparanase-1 Active

CATALOG #
AAA10906

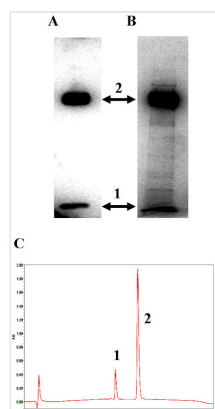
PRODUCT SYNONYMS

Heparanase-1; Recombinant Human Heparanase-1 Active; HPSE Active; HPSE active protein

PRODUCT SPECIFICATIONS

Purity/Purification	> 95% on SDS-PAGE (Fig. 1, B) > 95% on RP-HPLC (Fig. 1, C)
Form/Format	20 mM Acetate buffer; 750 mM NaCl; pH 5.4 per 1 µg of rhHPA1
Source	Recombinant Human Heparanase 1, Active Protein (HepaOne®) is produced in CHO cells. The protein was purified by several orthogonal chromatography steps.
Potency	The specific activity of HepaOne® in-house standard is about 0.7 Units (1 unit = 1 µmole of reducing ends of heparan sulfate substrate formed per minute per mg HepaOne® at 37°C). The enzymatic activity of each HepaOne® batch is comparable to the standard as determined by activity assay in which immobilized heparan, released due to heparanase activity, is quantified colorimetrically. Recommended reaction buffer: 20 mM Citrate Phosphate buffer, pH 5.4; 50mM NaCl; 1mM CaCl ₂
Patents	HepaOne® and its uses are protected by different patents and patent applications in the US and worldwide.
Identity	HepaOne® is identified by Western blot analysis with polyclonal rabbit anti-HPA1 antibodies as 2 subunits of 8-kDa and 50-kDa (Fig. 1, A)
Dry Ice Note	The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.
Preparation and Storage	Store at -80°C.

IMAGES



Application Data

Fig. 1. Purified CHO derived rhHPA1 was analyzed by: A. Western blot analysis using Polyclonal rabbit anti-HPA1 antibodies B. SDS-PAGE/GelCode Blue staining C. RPHPLC; 1, 8-kDa subunit; 2, 50-kDa subunit.

ADDITIONAL INFORMATION

Related Product Information for HPSE active protein	Background: Heparanase is an endo beta-D-glucuronidase, which degrades heparan sulfate side chains of heparan sulfate proteoglycans (HSPGs) in the extracellular matrix. Heparanase plays an important role in ECM degradation, facilitating the migration and extravasation of tumor cells and inflammatory leukocytes (1, 2, 3). Upon degradation, heparanase releases growth factors and cytokines that stimulate cell proliferation and chemotaxis (4, 5). Heparanase is a heterodimer comprised of a 50 kDa subunit harboring the active site and a 8 kDa subunit. It is produced as a latent 65 kDa precursor and proteolytically processed to its active form (1, 6). Heparanase is highly expressed in myeloid leukocytes (i.e. neutrophils) in platelets and in human placenta. Human heparanase was found to be upregulated in various types of primary tumors, correlating in some cases with increased tumor invasiveness and vascularity and with poor prospective survival (7, 8).
Product Categories/Family for HPSE active protein	Enzymes; Heparanase; HPSE Active
References	1. Vlodavsky, I. et al., Nat. Med. 5 (1999) 793-802.2. Vlodavsky, I and Friedman, Y., J. Clin. Invest. 108 (2001) 341-347.3. Parish, C.R. et al., Biochem. Biophys. Acta 1471 (2001) M99-M108.4. Vlodavsky, I. et al., Cancer Metastasis Rev. 9, (1990) 203-226.5. Bashkin, P. et al., . Biochemistry 28 (1989), 1737-1743.6. Fairbanks, M.B. et al., J. Biol. Chem. 274 (1999) 29587- 29590.7. Koliopanos, A.et al., Cancer Res. 61 (1992) 4655-4659.8. Gohji, K. et al., Int. J. Cancer 95 (2001) 295-301

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/hpse-active-protein/heparanase-1/10906>