

Human Antithrombin III protein (active)

Cat. No. GTX05084-pro

Applications Functional Assay**Species** Human**Package**

10 µg

PRODUCT

Summary

The activity of recombinant human antithrombin III was measured by its ability to inhibit thrombin cleavage of a fluorogenic peptide substrate Boc-VPR-AMC in the assay buffer 50 mM Tris, 10 mM CaCl₂, 150 mM NaCl, 0.05% (w/v) Brij-35, pH 7.5. Thrombin was diluted to 0.5 U with heparin at 50 µg/ml in the assay buffer and 10 µl different concentrations of recombinant human antithrombin III (MW: 50 KD) was incubated with 10 µl diluted thrombin at 37 °C for 30 minutes. Loading 50 µL of the incubated mixtures which were diluted five-fold in assay buffer into empty wells of a plate, and start the reaction by adding 50 µL of 200 µM substrate. Include a substrate blank containing 50 µL of assay buffer and 50 µL of 200 µM substrate. Then read at excitation and emission wavelengths of 380 nm and 460 nm, respectively, in kinetic mode for 5 minutes. This recombinant human antithrombin III significantly decreased thrombin activity. The inhibition IC₅₀ was <8 nM.

Applications

Application Note

The recombinant human antithrombin III significantly decreased thrombin activity. The inhibition IC₅₀ was <8 nM.

Observed MW (kDa) 62 kDa.

Properties

Form Lyophilized powder**Buffer** Reconstitute with 10mM PBS to 0.1-1.0 mg/mL. Do not vortex. Lyophilized from PBS, 0.01% SKL, 5% Trehalose.**Preservative** No preservatives**Storage** Store at -20°C or below. After reconstitution, keep as concentrated solution. Aliquot and store at -20°C or below. Avoid freeze-thaw cycles.**Region/Sequence** Native human Antithrombin III protein**Expression System** Native protein**Purification** Purified by salt co-precipitation and ionic-Exchange chromatography**Purity** >94% as determined by SDS-PAGE**Endotoxin** <1.0 EU/µg determined by LAL method**Conjugation** Unconjugated

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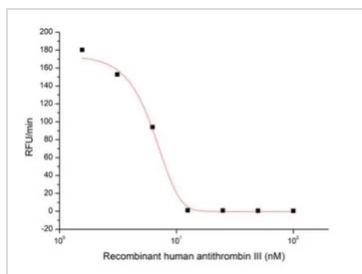
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Note

Purchasers shall not, and agree not to enable third parties to, analyze, copy, reverse engineer or otherwise attempt to determine the structure or sequence of the product.

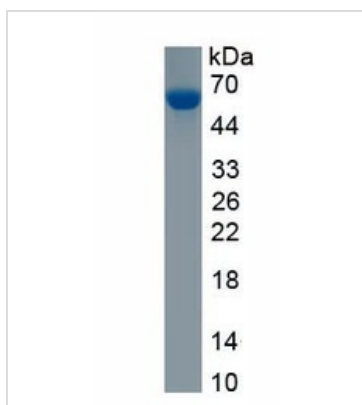
DATA IMAGES



GTx05084-pro Functional Assay Image

Inhibitory activity of thrombin-mediated cleavage of the fluorogenic peptide substrate Boc-VPR-AMC by various dilutions of GTx05084-pro Human Antithrombin III protein (active).

IC₅₀ : < 8 nM



GTx05084-pro Image

SDS-PAGE of GTx05084-pro Human Antithrombin III protein (active).



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