

Cathepsin A Active Protein | CTSA active protein

Active Cathepsin A (CTSA)

CATALOG # AAA150088	HOST E.coli	REACTIVITY Rattus norvegicus (Rat)	APPLICATIONS Activity Assay, Cell Culture
-------------------------------	-----------------------	--	---

PRODUCT SYNONYMS

Cathepsin A; Active Cathepsin A (CTSA); CTS-A; GLB2; GSL; NGBE; PPCA; PPGB; Protective Protein For Beta-Galactosidase; Galactosialidosis; Carboxypeptidase C; Carboxypeptidase L; CTSA active protein

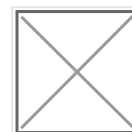
PRODUCT SPECIFICATIONS

Host	E.coli
Reactivity	Rattus norvegicus (Rat)
Purity/Purification	>92%
Form/Format	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Concentration	Original Concentration: 200ug/mL (varies by lot)
Applicable Applications for CTSA active protein	Activity Assay, Cell Culture
Source	Prokaryotic expression.
Residues	Ala151~Val394
Tags	Two N-terminal Tags, His-tag and GST-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	7.0
Usage	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

IMAGES


WB (Western Blot)

Western Blot Sample: Recombinant CTSA, Rat; Antibody: Rabbit Anti-Rat CTSA Ab


SDS-PAGE

Sample: Active recombinant CTSA, Rat



Bioactivity

The binding activity of CTSA with NEU. Cathepsin A (CTSA) is an enzyme that is classified both as a cathepsin and a carboxypeptidase. This gene encodes a glycoprotein that associates with lysosomal enzymes beta-galactosidase and neuraminidase to form a complex of high-molecular-weight multimers. The formation of this complex provides a protective role for stability and activity. It is protective for -galactosidase and neuraminidase. Besides, Neuraminidase (NEU) has been identified as an interactor of CTSA, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat CTSA and recombinant rat NEU. Briefly, CTSA were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to NEU-coated microtiter wells and incubated for 2h at 37. Wells were washed with PBST and incubated for 1h with anti-CTSA pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37 degree C. Finally, add 50uL stop solution to the wells and read at 450nm immediately. The binding activity of CTSA and NEU was shown in Figure 1, and this effect was in a dose dependent manner. The binding activity of CTS A with NEU.



Sequence

ADDITIONAL INFORMATION

Product Categories/Family for CTSA active protein

Enzyme & Kinase

NCBI AND UNIPROT INFORMATION

NCBI GI #	81884650
UniProt Accession #	Q6AYS3
Molecular Weight	Predicted Molecular Mass: 57.9kDa Accurate Molecular Mass: 57kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	Protective protein for beta-galactosidase
UniProt Protein Name	Carboxypeptidase
UniProt Gene Name	Ctsa

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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/e-coli-ctsa-rat-rattus-rattus-norvegicus-active-protein/cathepsin-a/150088>