

Active Recombinant Rat CtSa protein, His-tagged

Cat. No. CtSa-492R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Rat CtSa protein(Q6AYS3)(151~394 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Rat
Source	E.coli
ProteinLength	151-394 aa
Form	Lyophilized from sterile 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	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 β-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 100μ were then transferred to NEU-coated microtiter wells and incubated for 2h at 37°C. 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

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addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50μ stop solution to the wells and read at 450nm immediately. The binding activity of CTSA and NEU was shown, and this effect was in a dose dependent manner.

Molecular Mass	57.9kDa
Endotoxin	<1.0EU per 1μg (determined by the LAL method).
Purity	> 90% as determined by SDS-PAGE.
Storage	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

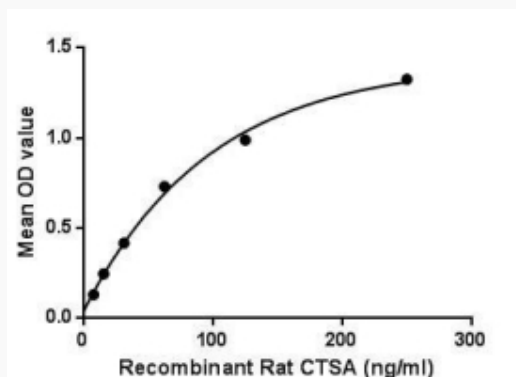
Gene Name	Ctsa cathepsin A [Rattus norvegicus]
Official Symbol	Ctsa
Synonyms	CTSA; cathepsin A; lysosomal protective protein; protective protein for beta-galactosidase; Ppgb;
Gene ID	296370
mRNA Refseq	NM_001011959
Protein Refseq	NP_001011959

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Activity



SDS-PAGE

