

Cystatin C (D6U3E) Rabbit mAb

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, W-S, IP	H	Endogenous	13	Rabbit IgG	#P01034	1471

Product Usage Information**Application**

Western Blotting
Simple Western™
Immunoprecipitation

Dilution

1:1000
1:10 - 1:50
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

Cystatin C (D6U3E) Rabbit mAb recognizes endogenous levels of total cystatin C protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human cystatin C protein.

Background

Cystatin C (cystatin-3, CST3) belongs to the cystatin type 2 superfamily of cysteine peptidase inhibitors (1). The 146 amino acid cystatin C precursor protein contains a 26 residue, amino-terminal secretory signal sequence. The mature 120 amino acid cystatin C protein contains two disulfide bridges (2,3). Cystatin C is secreted in body fluids and is a marker of kidney (4) and cardiovascular (5) dysfunction. Research studies report of changes in cystatin C levels in the cerebral spinal fluid as well as in specific neuronal cell populations in a number of neurodegenerative diseases (6-8). Interestingly, experimental evidence suggests that cystatin C has protective effects against neurodegeneration, such as inhibition of amyloid-β oligomerization and fibril formation (9,10), induction of autophagy (11), induction of neurogenesis (12), and inhibition of cysteine proteases whose activity has been associated with several neurodegenerative diseases (13).

Background References

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3. Turk, B. et al. (1997) *Biol Chem* 378, 141-50.
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6. Pasinetti, G.M. et al. (2006) *Neurology* 66, 1218-22.
7. Deng, A. et al. (2001) *Am J Pathol* 159, 1061-8.
8. Ishimaru, H. et al. (1996) *Brain Res* 709, 155-62.
9. Sastre, M. et al. (2004) *Neurobiol Aging* 25, 1033-43.
10. Selenica, M.L. et al. (2007) *Scand J Clin Lab Invest* 67, 179-90.
11. Tizon, B. et al. (2010) *PLoS One* 5, e9819.
12. Pirttilä, T.J. et al. (2005) *Neurobiol Dis* 20, 241-53.
13. Kaur, G. et al. (2010) *Am J Pathol* 177, 2256-67.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **W-S:** Simple Western™ **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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