

#24840 Store at -20°C

Cystatin C (D6U3E) Rabbit mAb

**Cell Signaling**
TECHNOLOGY®**Orders:** 877-616-CELL (2355)
orders@cellsignal.com**Support:** 877-678-TECH (8324)**Web:** info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

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

Product Usage Information**Application**Western Blotting
Immunoprecipitation**Dilution**1:1000
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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7. Deng, A. et al. (2001) *Am J Pathol* 159, 1061-8.
8. Ishimaru, H. et al. (1996) *Brain Res* 709, 155-62.
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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**WB:** Western Blotting **IP:** Immunoprecipitation**Cross-Reactivity Key**

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster
X: Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse
GP: Guinea Pig **Rab:** rabbit **All:** all species expected

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