Revision 1

Store at -20C

#4049

THEX1 Antibody

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:	UniProt ID:	Entrez-Gene Id:
WB, IP	M R	Endogenous	42	Rabbit	#Q8IV48	90459

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

Storage

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

Specificity / Sensitivity

THEX1 Antibody detects endogenous levels of total THEX1 protein.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to the sequence of mouse THEX1. Antibodies are purified by protein A and peptide affinity chromatography.

Background

THEX1 (3'hExo) is a 3' exonuclease that may play a role in the degradation of histone mRNA transcripts (1). A recently identified member of the DEDDh 3' exonuclease family, THEX1 binds the conserved stem-loop structure found at the 3' end of mRNA *in vitro* (2). The binding of THEX1 to mRNA requires the presence of a terminal ACCCA sequence and is enhanced by the concurrent binding of stem-loop binding protein (SLBP). Cleavage of histone mRNA by THEX1 exonuclease may help produce the rapid turnover of histone mRNA transcripts associated with the completion of DNA replication (3). Additional evidence suggests that THEX1 may be responsible for excising the remaining few 3' nucleotides following cleavage by a different enzyme (4).

Background References

1. Dominski, Z. and Marzluff, W.F. (1999) *Gene* 239, 1-14.
2. Dominski, Z. et al. (2003) *Mol Cell* 12, 295-305.
3. Yang, X.C. et al. (2006) *J Biol Chem* 281, 30447-54.
4. Mullen, T.E. and Marzluff, W.F. (2008) *Genes Dev* 22, 50-65.

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 BSA, 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

Trademarks and Patents

Limited Uses

therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.