

#9201 Store at -20C

CtIP (D76F7) 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	H Mk	Endogenous	110	Rabbit IgG	#Q99708	5932

Product Usage Information**Application**

Western Blotting

Dilution

1:1000

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

CtIP (D76F7) Rabbit mAb recognizes endogenous levels of total CtIP protein.

Source / Purification

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

Background

DNA damage checkpoints are critical for regulated repair of damaged DNA and genome maintenance. CtIP/RBBP8 (CtBP-interacting protein), initially characterized as a binding partner for the transcription factor CtBP, has emerged as a regulator of both cell cycle progression and repair of DNA double strand breaks (DSB). Along with the DSB-sensing MRN complex (MRE11-RAD50-NBS1), CtIP functions in the generation of single stranded DNA at DSBs, a process required for signaling to DNA repair machinery (reviewed in 1). CtIP is thought to be critical in the transition between sensing of DSBs and repair by homologous recombination (HR) (2,3).

In addition to HR, DSBs can also be repaired through nonhomologous end joining (NHEJ), and CtIP has been shown to have a role in signaling to the NHEJ pathway independently of its function in DSB end resection (4).

CtIP is also involved in cellular tolerance of topoisomerase inhibitors camptothecin and etoposide, which are used to treat cancer through their ability to introduce DSBs in cycling cells (5).

Background References

1. You, Z. and Bailis, J.M. (2010) *Trends Cell Biol* 20, 402-9.
2. You, Z. et al. (2009) *Mol Cell* 36, 954-69.
3. Eid, W. et al. (2010) *EMBO Rep* 11, 962-8.
4. Quennet, V. et al. (2010) *Nucleic Acids Res*, Epub ahead of print.
5. Nakamura, K. et al. (2010) *PLoS Genet* 6, e1000828.

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**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

Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc.
 All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.

Limited Uses

Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or 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.