

**Anti-CTIP (pS327) Antibody**  
**Rabbit polyclonal antibody to CTIP (pS327)**  
**Catalog # AP59933**

**Specification**

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**Anti-CTIP (pS327) Antibody - Product Information**

Application	<b>WB, E</b>
Primary Accession	<a href="#">O99708</a>
Other Accession	<a href="#">Q80YR6</a>
Reactivity	<b>Human, Mouse, Monkey</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>101942</b>

**Anti-CTIP (pS327) Antibody - Additional Information**

**Gene ID** 5932

**Other Names**

CTIP; DNA endonuclease RBBP8; CtBP-interacting protein; CtIP; Retinoblastoma-binding protein 8; RBBP-8; Retinoblastoma-interacting protein and myosin-like; RIM; Sporulation in the absence of SPO11 protein 2 homolog; SAE2

**Target/Specificity**

Recognizes endogenous levels of CTIP (pS327) protein.

**Dilution**

WB~~WB (1/500 - 1/1000)

E~~WB (1/500 - 1/1000)

**Format**

Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

**Storage**

Store at -20 °C. Stable for 12 months from date of receipt

**Anti-CTIP (pS327) Antibody - Protein Information**

**Name** RBBP8

**Synonyms** CTIP

**Function**

Endonuclease that cooperates with the MRE11-RAD50-NBN (MRN) complex in DNA-end resection, the first step of double-strand break (DSB) repair through the homologous recombination (HR) pathway (PubMed:<a href="http://www.uniprot.org/citations/17965729" target="\_blank">17965729</a>, PubMed:<a href="http://www.uniprot.org/citations/19202191" target="\_blank">19202191</a>)

target="\_blank">19202191</a>, PubMed:<a href="http://www.uniprot.org/citations/19759395" target="\_blank">19759395</a>, PubMed:<a href="http://www.uniprot.org/citations/20064462" target="\_blank">20064462</a>, PubMed:<a href="http://www.uniprot.org/citations/23273981" target="\_blank">23273981</a>, PubMed:<a href="http://www.uniprot.org/citations/26721387" target="\_blank">26721387</a>, PubMed:<a href="http://www.uniprot.org/citations/27814491" target="\_blank">27814491</a>, PubMed:<a href="http://www.uniprot.org/citations/27889449" target="\_blank">27889449</a>, PubMed:<a href="http://www.uniprot.org/citations/30787182" target="\_blank">30787182</a>). HR is restricted to S and G2 phases of the cell cycle and preferentially repairs DSBs resulting from replication fork collapse (PubMed:<a href="http://www.uniprot.org/citations/17965729" target="\_blank">17965729</a>, PubMed:<a href="http://www.uniprot.org/citations/19202191" target="\_blank">19202191</a>, PubMed:<a href="http://www.uniprot.org/citations/23273981" target="\_blank">23273981</a>, PubMed:<a href="http://www.uniprot.org/citations/27814491" target="\_blank">27814491</a>, PubMed:<a href="http://www.uniprot.org/citations/27889449" target="\_blank">27889449</a>, PubMed:<a href="http://www.uniprot.org/citations/30787182" target="\_blank">30787182</a>). Key determinant of DSB repair pathway choice, as it commits cells to HR by preventing classical non-homologous end-joining (NHEJ) (PubMed:<a href="http://www.uniprot.org/citations/19202191" target="\_blank">19202191</a>). Specifically promotes the endonuclease activity of the MRN complex to clear DNA ends containing protein adducts: recruited to DSBs by NBN following phosphorylation by CDK1, and promotes the endonuclease activity of MRE11 to clear protein-DNA adducts and generate clean double-strand break ends (PubMed:<a href="http://www.uniprot.org/citations/27814491" target="\_blank">27814491</a>, PubMed:<a href="http://www.uniprot.org/citations/27889449" target="\_blank">27889449</a>, PubMed:<a href="http://www.uniprot.org/citations/30787182" target="\_blank">30787182</a>, PubMed:<a href="http://www.uniprot.org/citations/33836577" target="\_blank">33836577</a>). Functions downstream of the MRN complex and ATM, promotes ATR activation and its recruitment to DSBs in the S/G2 phase facilitating the generation of ssDNA (PubMed:<a href="http://www.uniprot.org/citations/16581787" target="\_blank">16581787</a>, PubMed:<a href="http://www.uniprot.org/citations/17965729" target="\_blank">17965729</a>, PubMed:<a href="http://www.uniprot.org/citations/19759395" target="\_blank">19759395</a>, PubMed:<a href="http://www.uniprot.org/citations/20064462" target="\_blank">20064462</a>). Component of the BRCA1-RBBP8 complex that regulates CHEK1 activation and controls cell cycle G2/M checkpoints on DNA damage (PubMed:<a href="http://www.uniprot.org/citations/15485915" target="\_blank">15485915</a>, PubMed:<a href="http://www.uniprot.org/citations/16818604" target="\_blank">16818604</a>). During immunoglobulin heavy chain class-switch recombination, promotes microhomology-mediated alternative end joining (A-NHEJ) and plays an essential role in chromosomal translocations (By similarity). Binds preferentially to DNA Y-junctions and to DNA substrates with blocked ends and promotes intermolecular DNA bridging (PubMed:<a href="http://www.uniprot.org/citations/30601117" target="\_blank">30601117</a>).

### Cellular Location

Nucleus. Chromosome Note=Associates with sites of DNA damage in S/G2 phase (PubMed:10764811, PubMed:25349192). Recruited to DSBs by the MRE11- RAD50-NBN (MRN) complex following phosphorylation by CDK1, which promotes interaction with NBN (PubMed:27814491, PubMed:27889449, PubMed:33836577). Ubiquitinated RBBP8 binds to chromatin following DNA damage (PubMed:16818604).

### Tissue Location

Expressed in ER-positive breast cancer lines, but tends to be down-regulated ER-negative cells (at protein level)

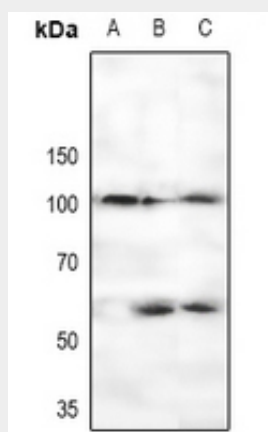
### Anti-CTIP (pS327) Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

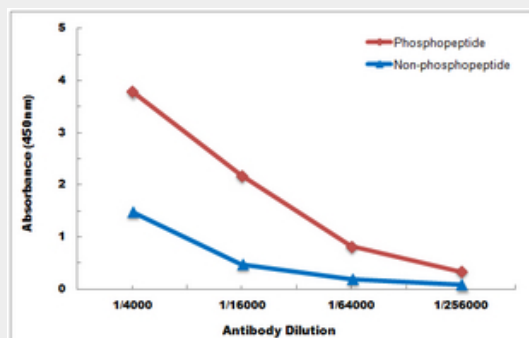
- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-CTIP (pS327) Antibody - Images



Western blot analysis of CTIP (pS327) expression in U87 (A), PC3 (B), MCF7 (C) whole cell lysates.



Direct ELISA antibody dose-response curve using Anti-CTIP (pS327) Antibody. Antigen (phosphopeptide and non-phosphopeptide) concentration is 5 ug/ml. Goat Anti-Rabbit IgG (H&L) - HRP was used as the secondary antibody, and signal was developed by TMB substrate.

### Anti-CTIP (pS327) Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human CTIP (pS327). The exact sequence is proprietary.