

**CtIP (Thr847) Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # AN1265****Specification**

---

**CtIP (Thr847) Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">O99708</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>101942</b>

**CtIP (Thr847) Antibody - Additional Information**

Gene ID	<b>5932</b>
Gene Name	<b>RBBP8</b>

**Target/Specificity**

Synthetic phospho-peptide corresponding to amino acid residues surrounding Thr847 conjugated to KLH

**Dilution**

WB~~ 1:1000

**Format**

Antigen Affinity Purified from Pooled Serum

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

CtIP (Thr847) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**

Blue Ice

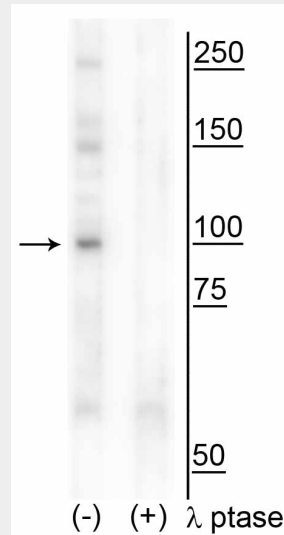
**CtIP (Thr847) Antibody - Protocols**

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](#)

### CtIP (Thr847) Antibody - Images



Western blot of human T47D cell lysate showing specific immunolabeling of the ~100 kDa CtIP phosphorylated at Thr847 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is completely eliminated by blot treatment with lambda phosphatase ( $\lambda$ -Ptase, 1200 units for 30 min).

### CtIP (Thr847) Antibody - Background

CtIP, C-terminal binding protein-interacting protein, is a DNA endonuclease activated by double stranded breaks (DSBs). DSB repairs can be performed by either one of two mechanisms; non-homologous end joining (NHEJ) or homologous recombination (HR). NHEJ is the predominant DSB repair pathway throughout the entire cell cycle, most importantly in the G1 phase (Rothkamm et al, 2003); while HR is important for repairing DSBs in S and G2 phases (Beucher et al, 2009). CtIP controls DSB resection; an event that only occurs in HR during G2-phase. Phosphorylation of Thr847 dictates the resection efficiency (Huertas et al, 2008). Furthermore, it has been found that DSBs undergo resection and repair in G1-phase cells via a process requiring PI3K phosphorylation of CtIP at Ser327 and Thr847 (Barton et al, 2014). Several additional phosphorylation sites within CtIP have been identified, but their significance in the repair of DNA have yet to be determined.