

Anti-CTIP Antibody
Rabbit polyclonal antibody to CTIP
Catalog # AP60625**Specification**

Anti-CTIP Antibody - Product Information

Application	WB, IH
Primary Accession	Q99708
Other Accession	Q80YR6
Reactivity	Human, Mouse, Monkey
Host	Rabbit
Clonality	Polyclonal
Calculated MW	101942

Anti-CTIP 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 protein.

Dilution

WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

IH~~WB (1/500 - 1/1000), IH (1/100 - 1/200)

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 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:17965729, PubMed:19202191)

target="_blank">19202191, PubMed:19759395, PubMed:20064462, PubMed:26721387). HR is restricted to S and G2 phases of the cell cycle and preferentially repairs DSBs resulting from replication fork collapse (PubMed:17965729, PubMed:19202191). Key determinant of DSB repair pathway choice, as it commits cells to HR by preventing classical non-homologous end-joining (NHEJ) (PubMed:19202191). 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:16581787, PubMed:17965729, PubMed:19759395, PubMed:20064462). Component of the BRCA1-RBBP8 complex that regulates CHEK1 activation and controls cell cycle G2/M checkpoints on DNA damage (PubMed:15485915, PubMed:16818604). 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:30601117).

Cellular Location

Nucleus. Chromosome. Note=Associates with sites of DNA damage in S/G2 phase (PubMed:10764811, PubMed:25349192). Ubiquitinated RBBP8 binds to chromatin following DNA damage (PubMed:16818604)

Tissue Location

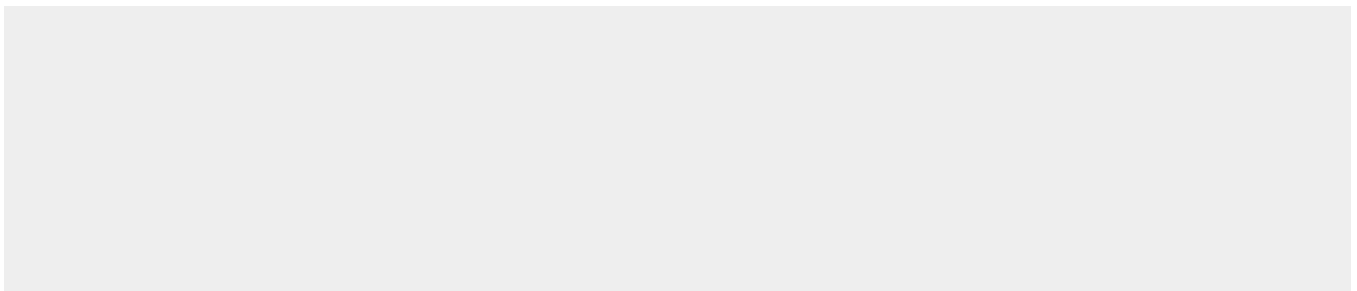
Expressed in ER-positive breast cancer lines, but tends to be down-regulated ER-negative cells (at protein level)

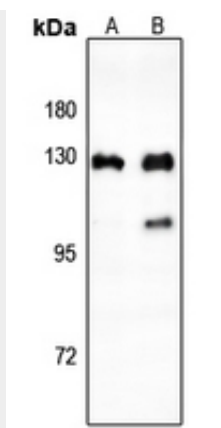
Anti-CTIP Antibody - Protocols

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

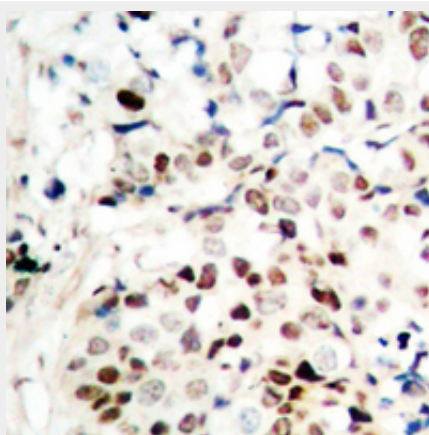
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-CTIP Antibody - Images





Western blot analysis of CTIP expression in HCT116 (A), MCF7 (B) whole cell lysates.



Immunohistochemical analysis of CTIP staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-CTIP Antibody - Background

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