

Product number #10190

## Mouse Anti- citrullinated COL2A1 Antibody (ACC4)

### Description

Affinity purified mouse monoclonal anti collagen II (COL2A1) antibody clone ACC4 in PBS, sterile filtered (0,2 µm). The ACC4 antibody is an anti-citrullinated protein antibody (ACPA) that on COL2A1 binds specifically to citrullinated C1 epitope on alpha-chain. This antibody has been used in applications including immunohistochemistry (IHC) and *in vivo* functional studies such as collagen antibody induced arthritis and evoked pain-like behavior study<sup>1,2</sup>.

### Target with alternative names

COL2A1, Collagen alpha-1(II) chain, CII, Col II, citrullinated CII; citrullinated Col II; citrullinated proteins.

UniProt: [P28481](#).

### Immunogen

The antibody was generated by immunization of DBA/1 or (B10.Q × DBA/1) F1 mice with Protein-arginine deiminase type-4 (PAD4) -treated triple helical CII peptides containing T and B cell epitopes<sup>2</sup>.

### Epitope

The ACC4 antibody is specific to citrullinated C1 epitope (position 359–369; ARGLTGRPGDA) on type 2 collagen alpha chain.

### Species reactivity

Mouse, bovine and potentially human

### Isotype

Mouse IgG1, κ

### Concentration

1 mg/ml

### Sizes available

100µg and 1mg

### Supplied in

PBS

### Storage

Centrifuge briefly prior to opening vial. Store at +4 °C short term (1-2 weeks). Aliquot and store at -20 °C long term. Avoid repeated freeze/thaw cycles.

### Recommended dilution

It is recommended the user determines the optimal dilution for their application. The typical starting working dilution for IHC is 1:100.

*For Research Use Only. Not for use in diagnostic procedures.  
Not for resale without express authorization.*

### References

1. He, Y., Ge, C., Moreno-Giró, À. et al. A subset of antibodies targeting citrullinated proteins confers protection from rheumatoid arthritis. *Nat Commun* 14, 691 (2023). PMID: [36754962](#)
2. Uysal, H. et al. Structure and pathogenicity of antibodies specific for citrullinated collagen type II in experimental arthritis. *J. Exp. Med.* 206, 449–462 (2009). PMID: [19204106](#)