**Product datasheet**

**Anti-Citrulline antibody ab100932**

**Overview**

- **Product name**: Anti-Citrulline antibody
- **Description**: Rabbit polyclonal to Citrulline
- **Host species**: Rabbit
- **Specificity**: ab100932 reacts specifically with intrapeptidic citrulline independently of the amino acid sequence. It does not react with free citrulline, ornithine or arginine. Citrulline is an un-natural amino-acid and its expression is very low. Factors limiting the detection are the amount of endogenous citrulline within a protein and the accessibility of the antibody to these sites.

**Tested applications**

- Suitable for: ELISA, ICC
- Unsuitable for: WB

**Immunogen**: Citrulline coupled to KLH via Glutaraldehyde

**Positive control**: Hypercitrullinated Histones induced in HL60 cells by DMSO + calcium + calcium ionophore A23187

**Properties**

- **Form**: Liquid
- **Storage instructions**: Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term.
- **Storage buffer**: Constituent: Whole serum
- **Purity**: Whole antiserum
- **Clonality**: Polyclonal
- **Isotype**: IgG

**Applications**

Our Abpromise guarantee covers the use of ab100932 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<td>Use at an assay dependent concentration.</td>
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### Application notes

Is unsuitable for WB.

### Target

#### Relevance

The amino acid Citrulline is required to detoxify the liver from ammonia, which is a waste product of the body from oxidation. Citrulline promotes energy and assists with the immune system. This unusual amino acid is formed in the urea cycle by the addition of carbon dioxide and ammonia to ornithine. It is then combined with aspartic acid to form arginosuccinic acid, which later is metabolized into the amino acid arginine.

### Images

**ELISA data showing the high immuno-reactivity of ab100932 against citrulline due to the high amounts of citrulline conjugated to BSA.**

**ELISA data demonstrating the specificity of ab100932 to citrulline naturally present in histones (endogenous citrulline).**
Immunocytochemical analysis of Human buccal mucosal cells, staining Citrulline with ab100932.

Cells were fixed with acetone followed by 2% glutaraldehyde, permeabilized with 0.1% Triton X-100 and blocked with 3% BSA for 20 minutes at 22°C. Samples were incubated with primary antibody (1/200 in PBS) for 15 hours at 4°C. An undiluted biotinylated anti-rabbit polyclonal IgG was used as the secondary antibody.