

# CoraLite®594-conjugated Band 3/AE1 Monoclonal antibody

Catalog Number: **CL594-66984**

## Basic Information

**Catalog Number:**

CL594-66984

**Size:**

1000 µg/ml

**Source:**

Mouse

**Isotype:**

IgG1

**Immunogen Catalog Number:**

AG28058

**GenBank Accession Number:**

BC101570

**GeneID (NCBI):**

6521

**UNIPROT ID:**

P02730

**Full Name:**

solute carrier family 4, anion exchanger, member 1 (erythrocyte membrane protein band 3, Diego blood group)

**Calculated MW:**

911 aa, 102 kDa

**Purification Method:**

Protein G purification

**CloneNo.:**

1E5C1

**Recommended Dilutions:**

IF-P 1:50-1:500

**Excitation/Emission maxima wavelengths:**

588 nm / 604 nm

## Applications

**Tested Applications:**

IF-P

**Species Specificity:**

human

**Positive Controls:**

IF-P : human placenta tissue,

## Background Information

Anion exchanger 1 (AE1), also known as band 3, is a 95-100 kDa transmembrane glycoprotein which is abundantly expressed in erythrocyte plasma membrane and mediates the electroneutral exchange of Cl<sup>-</sup> and HCO<sub>3</sub><sup>-</sup>. It contains a 52-55 kDa C-terminal membrane crossing domain and a 43 kDa N-terminal cytoplasmic domain. Degradation of band 3 protein occurred during erythrocyte aging. The oxidative stress can also activate the proteolysis of band 3 through caspases. This antibody is expected to recognize the intact band 3 (95-100 kDa) and various degradation products (38-60 kDa). (PMID: 22890269, 29240292, 28130418)

## Storage

**Storage:**

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

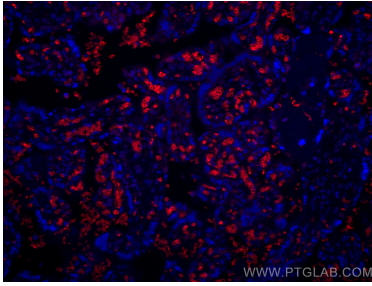
**Storage Buffer:**

PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

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## Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed human placenta tissue using CoraLite® 594 band 3/ AE1 antibody (CL594-66984, Clone: 1E5C1 ) at dilution of 1:200.