

## DESCRIPTION

|                                                                                                                                                                                                         |                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human                                                                                  |
| <b>Specificity</b>                                                                                                                                                                                      | Detects CLCA1 in direct ELISAs.                                                        |
| <b>Source</b>                                                                                                                                                                                           | Monoclonal Mouse IgG <sub>1</sub> Clone # 1022517                                      |
| <b>Purification</b>                                                                                                                                                                                     | Protein A or G purified from hybridoma culture supernatant                             |
| <b>Immunogen</b>                                                                                                                                                                                        | Human embryonic kidney cell HEK293-derived CLCA1<br>Asn22-Ser477<br>Accession # A8K714 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 700<br>Excitation Wavelength: 675-700 nm<br>Emission Wavelength: 723 nm    |
| <b>Formulation</b>                                                                                                                                                                                      | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide                           |
| *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions. |                                                                                        |

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

**Immunohistochemistry** Optimal dilution of this antibody should be experimentally determined.

## PREPARATION AND STORAGE

|                                |                                                                                                                   |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------|
| <b>Shipping</b>                | The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below. |
| <b>Stability &amp; Storage</b> | Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied                          |

## BACKGROUND

CLCA1 is a member of the calcium sensitive chloride conductance protein family which may be involved in mediating calcium-activated chloride conductance. This protein is expressed in goblet cells and intestinal basal crypt epithelial of the small intestine and colon. CLCA1 regulates mucin expression and participates in innate immune responses by binding to yet unidentified molecules on inflammatory cells for cytokine and chemokine production. CLCA1 also targets lymphatic endothelial cells and cancer cells. CLCA1 is a candidate as a modulating factor in the pathogenesis of mucus hypersecretory-associated respiratory and gastrointestinal diseases including asthma, COPD, cystic fibrosis, pneumonia, colon colitis, cystic fibrosis intestinal mucous disease, ulcerative colitis, and gastrointestinal parasitic infection.

## PRODUCT SPECIFIC NOTICES

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