

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Reg1A in Western blots. Shows 5% cross-reactivity with recombinant human (rh) Reg1B and no cross-reactivity with rhReg3A, recombinant mouse Reg1, or recombinant rat Reg1.
<b>Source</b>	Monoclonal Rat IgG <sub>2B</sub> Clone # 431202
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Reg1A Gln23-Asn166 Accession # P05451
<b>Conjugate</b>	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
<b>Formulation</b>	Supplied 0.2 mg/mL in a saline solution containing BSA and 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.

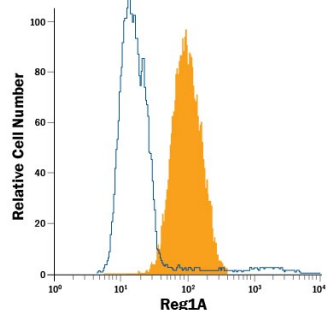
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Intracellular Staining by Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	See Below

## DATA

### Intracellular Staining by Flow Cytometry



**Detection of Reg1A in AGS Human Cell Line by Flow Cytometry.** AGS human gastric adenocarcinoma cell line was stained with Rat Anti-Human Reg1A Alexa Fluor® 488-conjugated Monoclonal Antibody (Catalog # IC4937G, filled histogram) or isotype control antibody (Catalog # IC0041G, open histogram). Cells were fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005). View our protocol for [Staining Intracellular Molecules](#).

## PREPARATION AND STORAGE

**Shipping** The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

**Stability & Storage** **Protect from light. Do not freeze.**

- 12 months from date of receipt, 2 to 8 °C as supplied.

## BACKGROUND

Human Reg1A, also known as Reg1α, PTP, PSP and Lithostathine, is a 16-22 kDa, variably glycosylated member of the Reg (Regenerating) family, C-type lectin superfamily of molecules. It is further classified as a type I subfamily member based on gene organization and expression pattern. These are four Reg subfamilies spread across multiple species, with three (or four) additional human Reg family genes assigned to three of the subfamilies. Reg1A is secreted, and circulates as either a monomer, dimer, or tetramer. Once secreted, Reg1A may undergo proteolysis with removal of the N-terminal 11 amino acids (aa). This renders it insoluble with subsequent fibril formation. Reg1A is typically inducible, and human cells reported to express Reg1A include pancreatic islet β-cells, neurons, intestinal Paneth cells, stomach Chief cells, cardiomyocytes, salivary duct epithelium and antral endocrine cells of the stomach. Reg1A has proliferative effects on multiple cell types, and likely serves as an anti-inflammatory agent. This is presumably mediated by binding to its receptor, EXTL3. Mature human Reg1A (aa 23-166) shares 75%, 69% and 88% aa sequence identity with mouse Reg1, rat Reg, and human Reg1B, respectively.

# Human Reg1A Alexa Fluor® 488-conjugated Antibody

Monoclonal Rat IgG<sub>2B</sub> Clone # 431202

Catalog Number: IC4937G

100 µg

## PRODUCT SPECIFIC NOTICES

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