

DESCRIPTION

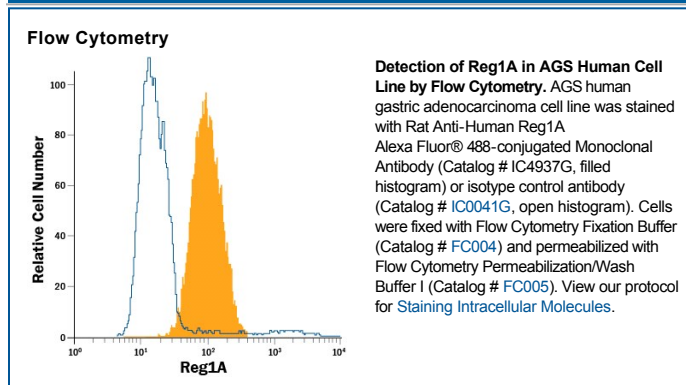
Species Reactivity	Human
Specificity	Detects human Reg1A in direct ELISAs and Western blots. Does not cross-react with recombinant human (rh) Reg1B, rhReg4, recombinant rat (rr) Reg2, or rrReg3.
Source	Monoclonal Rat IgG _{2B} Clone # 431202
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Reg1A Gln23-Asn166 Accession # P05451
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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.

	Recommended Concentration	Sample
Intracellular Staining by Flow Cytometry	5 µL/10 ⁶ cells	AGS human gastric adenocarcinoma cell line fixed with Flow Cytometry Fixation Buffer (Catalog # FC004) and permeabilized with Flow Cytometry Permeabilization/Wash Buffer I (Catalog # FC005)

DATA



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. There 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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc. and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.