Human Relaxin-1 Alexa Fluor® 750-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 351713

Catalog Number: FAB3257S

100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects the precursor form of human Relaxin-1 in direct ELISAs and Western blots. Does not detect mature Relaxin-1 heterodimer. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) Relaxin-2 precursor or rhRelaxin-3 pre
Source	Monoclonal Mouse IgG_{2B} Clone # 351713
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human Relaxin-1 Lys26-Cys185 Accession # P04808
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	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.*

Western Blot	Optimal dilution of this antibody should be experimentally determined.

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 Relaxin-1, also called H1 Relaxin or RLN1, is one of three human relaxins in the structurally related insulin/relaxin superfamily (1, 2). Relaxin-1 is thought to be the result of duplication of the Relaxin-2 gene in higher primates only. In species below higher primates, Relaxin-1 is the equivalent of human Relaxin-2. Relaxin-1 is found in some but not all tissues expressing Relaxin-2. It is prominent in the prostate, but also present in decidua, placenta, endometrium and at low levels in the myocardium (2, 3). As with other insulin/relaxin superfamily members, human Relaxin-1 is synthesized as a preprohormone (4). Processing of the 21 kDa preprorelaxin-1 includes removal of the signal sequence, formation of two disulfide bonds between A and B chains and removal of the intervening C-chain by a prohormone convertase. The resulting mature protein is an unglycosylated, 6 kDa dimer of disulfide-linked A and B chains. Human Relaxin-1 shares 76% amino acid (aa) identity with human Relaxin-2, and 43%, 50% and 43% aa identity with mouse, rat and canine Relaxin-1, respectively. An alternate splice form of unknown significance has a 47 aa substitution which does not have typical C-chain cleavage motifs (5). Relaxins confer activity by binding to leucine-rich G-protein coupled receptors LGR7 and LGR8 (2, 6). Prostatic relaxins are anti-apoptotic and contribute to development and maintenance of male fertility. It is not clear whether human Relaxins -1 and -2 have distinct functions. Both use the same receptor and have the same critical amino acids for folding and for receptor interaction. While receptor affinity is similar, activity is lower for Relaxin-1 as compared to Relaxin-2 (7). Progesterone increases expression of only Relaxin-2, while glucocorticoids increase expression of both (8).

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.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475