

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Pro-Relaxin-3 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human mature Relaxin-3 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Pro-Relaxin-3 Ala27-Cys142. Cross-reactivity with mature Relaxin-3 was removed. Accession # Q8WXF3
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.
Immunohistochemistry	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-3 (H3 relaxin, INSL7) is one of seven relaxin-like peptides belonging to the insulin superfamily (1-4). Unlike human relaxins 1 and 2, it does not play a role in reproduction but appears to be a neuropeptide involved in stress response in the brain stem (3-5). The 142 amino acid (aa) Relaxin-3 pre-proprotein is processed to remove a 25 aa signal peptide and a connecting peptide (aa 53-118). The resulting mature Relaxin-3 is a 5.5 kDa, 51 aa secreted heterodimer of A (aa 119-142) and B (aa 26-52) peptides connected by two intermolecular disulfide bonds (1). Relaxin-3 is the only known ligand for the G-protein-coupled receptor GPCR135, designated RXFP3 (4, 6). In rodents, GPCR135 is expressed primarily in the supraoptic and paraventricular nucleus (6). This region has connections to the dorsal tegmental region of the pons (also called the nucleus incertus), where expression of Relaxin-3 is highest (5). Relaxin-3 also binds the more widely-expressed LGR7 (RXFP1) receptor, but with lower affinity than that of Relaxin-2 (1, 7). Although binding of Relaxin-3 to LGR7 increases intracellular cAMP, binding to GPCR135 inhibits cAMP accumulation, indicating coupling to G_i, G_o or G_z by this receptor (1, 5). Relaxin-3 expression does not overlap well with its other receptor, GPCR142, which instead appears to be the primary receptor for INSL5 (3, 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.