Human Relaxin-2 Antibody

Monoclonal Rat IgG_1 Clone # 349102

Catalog Number: MAB2804

DESCRIPTION

Species Reactivity	Human
Specificity	Detects both the pro and mature forms of human Relaxin-2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) Relaxin-1 or rhRelaxin-3 is observed.
Source	Monoclonal Rat IgG_1 Clone # 349102
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human Relaxin-2 Val23-Cys185 Accession # P04090
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

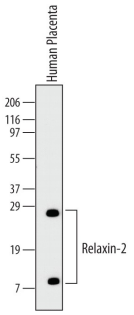
APPLICATIONS

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
Western Blot	2 µg/mL	See Below
Neutralization	Measured by its ability to neutralize Relaxin-2-induced cAMP production in the THP-1 human acute monocytic leukemia cell line. Parsell, D. A. *et al*. (1996) J. Biol. Chem. **271**:27936. The Neutralization Dose (ND_{50}) is typically 1.5-6.0 µg/mL in the presence of 7.5 ng/mL Recombinant Human Relaxin-2.	

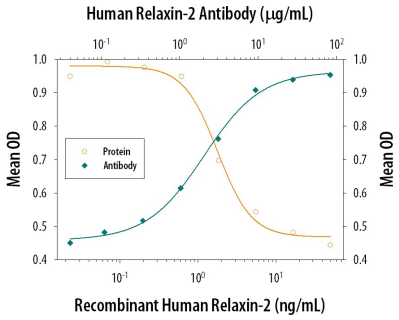
DATA

Western Blot



Detection of Human Relaxin-2 by Western Blot. Western blot shows lysates of human placenta. PVDF membrane was probed with 2 µg/mL of Rat Anti-Human Relaxin-2 Monoclonal Antibody (Catalog # MAB2804) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). Specific bands were detected for Relaxin-2 at approximately 8 kDa and 27 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Neutralization



cAMP production Induced by Relaxin-2 and Neutralization by Human Relaxin-2 Antibody. Recombinant Human Relaxin-2 (Catalog # 3596-RN) induces cAMP production in the THP-1 human acute monocytic leukemia cell line in a dose-dependent manner (orange line), as measured by cAMP Parameter Assay Kit (Catalog # KGE002B). cAMP production elicited by Recombinant Human Relaxin-2 (7.5 ng/mL) is neutralized (green line) by increasing concentrations of Rat Anti-Human Relaxin-2 Monoclonal Antibody (Catalog # MAB2804). The ND_{50} is typically 1.5-6.0 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Human Relaxin-2/H2 is a 6 kDa member of the insulin/relaxin gene superfamily. Relaxin-2 is synthesized as a 185 aa preprohormone that is proteolytically processed into a nonglycosylated, disulfide-linked, 53 aa mature heterodimer that contains a 29 aa B chain (aa 25-53) and a 24 aa A chain (aa 161-185). An alternate splice form of human Relaxin-2 is known that contains the B chain and an uncleaved 47 aa extension. Mature human Relaxin-2 heterodimer is 48%, 44% and 43% aa identical to rat, canine and porcine Relaxin-2, respectively.

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