

32-13387: RLN3 Human

Application : Functional Assay

Alternative Name : Relaxin 3, Prorelaxin H3, RXN3, InsI7, ZINS4, H3, Relaxin 3 (H3), Relaxin-3, RLN3.

Description

Source: Escherichia Coli.

Sterile Filtered White lyophilized (freeze-dried) powder.

Relaxin-3 (RLN3) belongs to the relaxin family. Relaxins are endocrine and autocrine/paracrine hormones. Relaxin, which is produced by the ovary, targets the mammalian reproductive system to ripen the cervix, elongate the pubic symphysis and inhibit uterine contraction. Unlike human Relaxins 1 and 2, Relaxin 3 does not seem to have a role in reproduction; however it is involved in stress response in the brain stem. RLN3 is the only known ligand for the G-protein-coupled receptor GPCR135, titled RXFP3. In addition, RLN3 binds the LGR7 (RXFP1) receptor, however with lower affinity than Relaxin-2. Even though binding of RLN3 to LGR7 increases intracellular cAMP, binding to GPCR135 suppresses cAMP accumulation, indicating coupling to Gi, Go, or Gz by this receptor.

Relaxin-3 Human Recombinant produced in E.Coli is a disulfide-linked heterodimeric, non-glycosylated, polypeptide chain containing 24 amino acids for A chain and 27 amino acids for B chain and having a molecular mass of 2.5kDa for A chain and 3kDa for B chain. The Relaxin-3 is purified by proprietary chromatographic techniques.

Product Info

Amount : 5 µg / 25 µg

Purification : Greater than 95.0% as determined by SDS-PAGE.

Lyophilized from a 0.2µm filtered solution in Acetonitrile and TFA.

Content : It is recommended to reconstitute the lyophilized RLN3 in sterile 18M-cm H2O not less than 100µg/ml, which can then be further diluted to other aqueous solutions.

Storage condition : Lyophilized RLN3 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Relaxin-3 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Amino Acid : A chain: DVLAGLSSSC CKWGCSKSEI SSLC. B chain: RAAPYGVRLCG REFIRAVIFT CGGSRW.

Application Note

The ED50, as measured by cAMP accumulation in human THP-1 cells, is less than 17.5ng/ml.