

TECHNICAL DATA SHEET

Recombinant Human INSL5/INSL7 Hybrid (Carrier-free)

Catalog Number: 21-7110

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

CONTENTS

Recombinant Human INSL5/INSL7 Hybrid (Carrier-free)

DESCRIPTION

At least seven relaxin-like proteins make up the Insulin/Relaxin superfamily. Most consist of two peptide subunits, an alpha-chain and a beta-chain, linked by disulfide bonds. INSL5 has been identified as the cognate ligand for the G-protein-coupled receptor GPCR142 (RXFP4). INSL7 (Relaxin-3) has been reported as a ligand for LGR7, as well as for GPCR135 and GPCR142. Sequence analysis indicates that INSL5 and INSL7 are highly homologous, but INSL5 seems to be specific only to GPCR142. The recombinant INSL5/INSL7 hybrid protein can activate the G protein coupled receptors GPCR135 and GPCR142, but unlike INSL7, does not induce significant activation of the LGR7 receptor.

MOLECULAR MASS

The Recombinant Human INSL5/INSL7 hybrid consists of a 21 amino acid alpha-chain (INSL5) linked to a 27 amino acid beta-chain (INSL7) by two disulfide bonds and has a molecular weight of 5.2 kDa.

AMINO ACID SEQUENCE

A-chain: QDLQLCCTD GCSMTDLSAL C B-chain: RAAPYGVRLC GREFIRAVIF TCGGSRW

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Verified by UV Spectroscopy and/or SDS-PAGE gel.

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/μg of protein (<1 EU/μg).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

BIOACTIVITY

Data not available.

RESEARCH AREAS

Diabetes, Lipid Metabolism, Neurobiology

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Liu C, Kuei C, Sutton S, Chen J, Bonaventure P, Wu J, Nepomunceno D, Kamme F, Tran DT, Zhu J, et al. 2005. J Biol Chem. 280: 292-300. Bathgate RA, Ivell R, Sanborn BM, Sherwood OD and Summers RJ. 2006. Pharmacol Rev. 58(1): 7-31. Conklin D, Lofton-Day CE, Haldeman BA, Ching A, Whitmore TE, Lok S and Jaspers S. 1999. Genomics. 60(1): 50-56. Liu C and Lovenberg TW. 2008. Results Probl Cell Differ. 46: 213-237.

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