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Type XIV RTKs: RET in GtoPdb v.2025.3

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Abstract

The RET (REarranged during Transfection) receptor is a transmembrane tyrosine kinase enzyme enzyme. RET forms a complex with members of the GPI-linked GDNF family receptors (GFR) to respond to GDNF family ligands, including glial cell-derived neurotrophic factors including glial cell-derived neurotrophic factor GDNF (211 aa); neurturin (197 aa); artemin (237 aa) and persephin (156 aa). RET also forms a complex with GFRAL, which is activated by growth differentiation factor 15 (GDF15) [25, 35]. RET is involved in neural crest development. Loss of function mutations lead to Hirschprung's disease, while gain of function mutations lead to multiple endocrine neoplasias type 2A and 2B. There are isoforms - RET51 and RET9 - with distinct signalling properties.

Contents

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Database links

Type XIV RTKs: RET
https://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=794
Receptors
Ret(ret proto-oncogene)
https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=2185

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