

SSTR2-FC recombinant protein

Catalog No: YD3037

Reactivity: Human;

Purity: >90% as determined by SDS-PAGE

Gene Name: SSTR2

Protein Name: Somatostatin receptor type 2 (SS-2-R) (SS2-R) (SS2R) (SST2) (SRIF-1)

Sequence: Amino acid:1-43, with FC tag.

Human Gene Id: 6752

Human Swiss Prot

No:

Formulation: Phosphate-buffered solution

P30874

Source: Mammalian cells

Storage Stability: -15°C to -25°C/1 year(Avoid freeze / thaw cycles)

Function: Receptor for somatostatin-14 and -28. This receptor is coupled via pertussis

toxin sensitive G proteins to inhibition of adenylyl cyclase. In addition it stimulates phosphotyrosine phosphatase and PLC via pertussis toxin insensitive as well as sensitive G proteins. Inhibits calcium entry by suppressing voltage-dependent calcium channels. Acts as the functionally dominant somatostatin receptor in pancreatic alpha- and beta-cells where it mediates the inhibitory effect of somatostatin-14 on hormone secretion. Inhibits cell growth through enhancement of MAPK1 and MAPK2 phosphorylation and subsequent up-regulation of CDKN1B. Stimulates neuronal migration and axon outgrowth and may participate

in neuron development and maturation during brain development. Mediates negative regulation of insulin receptor signaling through PTPN6. Inactivates

SSTR3 receptor function following heterodimerization.

Subcellular Location:

Cell membrane; Multi-pass membrane protein. Cytoplasm. Note=Located mainly at the cell surface under basal conditions. Agonist stimulation results in

internalization to the cytoplasm.



Expression:

Expressed in both pancreatic alpha- and beta-cells (at protein level). Expressed at higher levels in the pancreas than other somatostatin receptors. Also expressed in the cerebrum and kidney and, in lesser amounts, in the jejunum, colon and liver. In the developing nervous system, expressed in the cortex where it is located in the preplate at early stages and is enriched in the outer part of the germinal zone at later stages. In the cerebellum, expressed in the deep part of the external granular layer at gestational week 19. This pattern persists until birth but disappears at adulthood.

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