Anti-GLP1R Antibody

Alternative Names: GLP-1, GLP-1-R, GLP-1R

Catalogue Number: AB18-10050-100ug

Size: 100 µg

Background Information

Glucagon-like peptide-1 receptor (GLP1R) is a 7-transmembrane receptor protein found on beta cells of the pancreas. It functions as a receptor for glucagon-like peptide 1 (GLP-1) hormone, which stimulates glucose-induced insulin secretion. GLP1R functions at the cell surface and becomes internalised in response to GLP-1 and GLP-1 analogs, playing an important role in the signalling cascades leading to insulin secretion. It is a member of the glucagon receptor family of G protein-coupled receptors [1]. GLP1R is composed of two domains, an extracellular domain that binds the C-terminal helix of GLP-1 [2], and a transmembrane domain [3] that binds the N-terminal region of GLP-1 [4][5][6].
GLP1R also displays neuroprotective effects in animal models. Polymorphisms in this gene are associated with diabetes, making it an important drug target for the treatment of type 2 diabetes. Alternative splicing of the GLP1R gene results in multiple transcript variants.

Product Information

Antibody Type:	Polyclonal	**Host:**	Rabbit
Isotype:	IgG	**Species Reactivity:**	Human, Mouse, Rat
Immunogen:	A synthetic peptide from the N-terminal region of Human GLP1R		
Format:	100 µg in 100 µl PBS containing 0.02% sodium azide.		
Storage Conditions:	6 months: 4˚C. Long-term storage: -20˚C. Avoid multiple freeze and thaw cycles.		
Applications:	WB WB 1:500-2000.		

Additional Information

Subcellular location:	Cell membrane, Multi-pass membrane protein	**MW:**	53kDa (Intended as a general guide and does not allow for all isoforms and species variations)
Gene ID	2740	**Uniprot ID:**	P43220

References

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2. Underwood CR, Garibay P, Knudsen LB, Hastrup S, Peters GH, Rudolph R, Reedtz-Runge S (June 2010). "Crystal structure of glucagon-like peptide-1 in complex with the extracellular domain of the glucagon-like peptide-1 receptor". Journal of Biological Chemistry. 285 (1): 723–730.
3. Song G, Yang D, Wang Y, de Graaf C, Zhou Q, Jiang S, Liu K, Cai X, Dai A, Lin G, Liu D, Wu F, Wu Y, Zhao S, Ye L, Han GW, Lau J, Wu B, Hanson MA, Liu ZJ, Wang MW, Stevens RC (2017). "Human GLP-1 receptor transmembrane domain structure in complex with allosteric modulators)". Nature. 546: 312–315.
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6. Yang D, de Graaf C, Yang L, Song G, Dai A, Cai X, Feng Y, Reedtz-Runge S, Hanson MA, Yang H, Jiang H, Stevens RC, Wang MW (June 2016). "Structural Determinants of Binding the Seven-transmembrane Domain of the Glucagon-like Peptide-1 Receptor (GLP-1R)". Journal of Biological Chemistry. 291 (25): 12991–3004.
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