

M6PR (242-277) Human

Mannose-6-Phosphate Receptor (242-277) Human Recombinant

RCP1292

Product Overview

Name	M6PR (242-277) Human
Accession(Primary)	P20645
Description	Mannose-6-Phosphate Receptor (242-277) Human Recombinant

Target information (P20645)

Gene Name

About Gene Symbol

Background

Mannose 6-phosphate receptors are membrane proteins which take part in the intracellular transport of lysosomal enzymes. These receptors recognize and sort lysosomal hydrolases, facilitate their delivery to lysosomes via endocytic pathways. M6PR binds to mannose 6-phosphate (M6P) residues on newly synthesized lysosomal enzymes in the Golgi apparatus, directing them to lysosomes. After delivering enzymes to lysosomes, M6PRs are recycled back to the cell surface. This mechanism is critical for maintaining cellular homeostasis and efficient enzyme delivery. M6PRs may also play a role in signaling pathways, influencing cellular responses to stress and metabolic changes. Mutations or dysfunction in M6PRs can cause lysosomal storage disorders, emphasizing their importance in human health. Recombinant M6PR has significant implications in therapeutic development, mainly in understanding lysosomal storage diseases and enhancing enzyme replacement therapies.