

Recombinant Rat Erbb4 Protein, C-hFc-tagged

Product Information

Cat	IMP-4457
Official Symbol	Erbb4
Product Overview	Recombinant rat ERBB4 (AAQ77349.1)(Met1-Pro651) was expressed with the Fc region of human IgG1 at the C-terminus.
Description	<p>ERBB4 is a single-pass type I membrane protein with multiple cysteine rich domains, a transmembrane domain, a tyrosine kinase domain, a phosphatidylinositol-3 kinase binding site and a PDZ domain binding motif. ERBB4 is expressed at highest levels in brain, heart, kidney, in addition to skeletal muscle, parathyroid, cerebellum, pituitary, spleen, testis and breast. And lower levels in thymus, lung, salivary gland, and pancreas. It specifically binds to and is activated by neuregulins, NRG-2, NRG-3, heparin-binding EGF-like growth factor, betacellulin and NTAK. ERBB4 also can be activated by other factors and induces a variety of cellular responses including mitogenesis and differentiation. ERBB4 regulates development of the heart, the central nervous system and the mammary gland, gene transcription, cell proliferation, differentiation, migration and apoptosis. It is required for normal cardiac muscle differentiation during embryonic development, and for postnatal cardiomyocyte proliferation. ERBB4 also play a role on the normal development of the embryonic central nervous system, especially for normal neural crest cell migration and normal axon guidance. It is required for mammary gland differentiation, induction of milk proteins and lactation.</p>
Expression System	HEK293
Species	Rat
Tag	C-hFc
Predicted N Terminal	Gln 26
Form	Lyophilized from sterile PBS, pH 7.4, 5 % trehalose, 5% mannitol and 0.01% Tween80.
Molecular Mass	The recombinant rat ERBB4/Fc is a disulfide-linked homodimer. The reduced monomer comprises 867 amino acids and has a predicted molecular mass of 96.9 kDa. The apparent molecular mass of the protein is approximately 119 kDa in SDS-PAGE under reducing conditions.
Protein length	Met1-Pro651
Endotoxin	< 1.0 EU/μg of the protein as determined by the LAL method
Purity	> 95 % as determined by SDS-PAGE

Storage

Samples are stable for up to twelve months from date of receipt at -20 to -80 centigrade. Store it under sterile conditions at -20 to -80 centigrade. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.

Reconstitution

A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.

SDS-PAGE