

**PE-Cy5.7 Mouse Anti-human/horse
EGFR Antibody *EGFR1, monoclonal, Cross
Adsorbed***

Catalog number: V103625
Unit size: 100 tests

Product Details

Storage Conditions	2-8°C with minimized light exposure. Do not freeze.
Expiration Date	12 months upon receiving
Concentration	Lot specific (please consult certificate of analysis for given lot)
Formulation	Phosphate-buffered saline (PBS, pH 7.2), 15 mM sodium azide, 0.2% (w/v) BSA

Antibody Properties

Species Reactivity	Human, horse
Class	Primary
Clonality	Monoclonal
Host	Mouse
Immunogen	EGFR
Clone	EGFR1
Conjugate	PE-Cy5.7

Biological Properties

Preparation	Antibody purified by affinity chromatography, cross-adsorbed against mouse serum and then conjugated with PE-Cy5.7 under optimal conditions
Application	FC (QC TESTED)

Applications

Epidermal growth factor receptor is a 134 kDa transmembrane protein that can be located in the plasma membrane, protein-containing complex and apical plasma membrane of cells. It is alternatively called receptor tyrosine-protein kinase erbB-1 and proto-oncogene c-ErbB-1. In humans, epidermal growth factor receptor is the subject of extensive examination in part because of the fact that it is involved with the epidermal growth factor receptor signaling pathway, negative regulation of epidermal growth factor receptor signaling pathway and ERBB2 signaling pathway, and moreover, has been associated with essential functions such as transmembrane receptor protein tyrosine kinase, protein tyrosine kinase and epidermal growth factor-activated receptor activity. It binds with protein kinase, calmodulin and ATPase. Sequencing of epidermal growth factor receptor has supported it contains 3 conserved structural units: cytoplasmic, extracellular and protein kinase domain. Epidermal growth factor receptor enhances DNA-templated transcription, smooth muscle cell proliferation and DNA replication. But it also suppresses apoptotic process, mitotic cell cycle and protein catabolic process. It takes part in organismal processes, for instance, ossification, salivary gland morphogenesis and cell-cell adhesion. It takes part in processes such as nitric-oxide synthase activity, transcription by RNA polymerase II and cell motility. Mutations and abnormalities in epidermal growth factor receptor have been associated with a number of diseases, for example, neonatal inflammatory skin and bowel disease-2 (NISBD2) and lung cancer (LNCr). Neonatal inflammatory skin and bowel disease-2, an autosomal recessive inheritance disorder characterized by diarrhea, epidermal acanthosis and dehydration, has especially been of

interest to scientists.