

[Open Peer Review on Qeios](#)

Phosphorylated Epidermal Growth Factor Receptor

National Cancer Institute

Source

National Cancer Institute. *Phosphorylated Epidermal Growth Factor Receptor*. NCI Thesaurus. Code C123765.

Epidermal growth factor receptor protein (EGFR) bearing phosphorylated tyrosine residues within the 194 amino acids of the carboxyl-terminal intracellular domain of the protein. Five ligand-dependent autophosphorylation sites have been identified; overexpression or mutation of EGFR can decouple ligand-binding from autophosphorylation and the subsequent activation of downstream signaling pathways. The presence of phosphorylated EGFR in a malignant tumor is generally correlated with poor prognosis and could be used as a predictive biomarker to identify individuals who may respond to EGFR-tyrosine kinase inhibitor treatment.