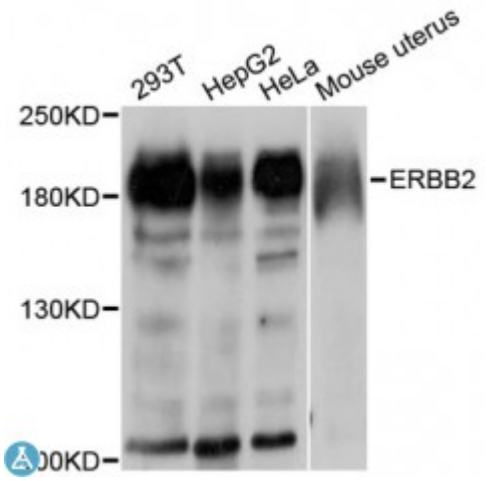
Anti-ErbB2 Antibody



Description	This gene encodes a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. This protein has no ligand binding domain of its own and therefore cannot bind growth factors. However, it does bind tightly to other ligand-bound EGF receptor family members to form a heterodimer, stabilizing ligand binding and enhancing kinase-mediated activation of downstream signalling pathways, such as those involving mitogen-activated protein kinase and phosphatidylinositol-3 kinase. Allelic variations at amino acid positions 654 and 655 of isoform a (positions 624 and 625 of isoform b) have been reported, with the most common allele, Ile654/Ile655, shown here. Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors. Alternative splicing results in several additional transcript variants, some encoding different isoforms and others that have not been fully characterized.

Model	STJ113560
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	WB
Immunogen	A synthetic peptide of human ErbB2
Gene ID	2064
Gene Symbol	ERBB2
Dilution range	WB 1:500 - 1:2000
Tissue Specificity	Expressed in a variety of tumor tissues including primary breast tumors and tumors from small bowel, esophagus, kidney and mouth

Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Receptor tyrosine-protein kinase erbB-2
Molecular Weight	137.91 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:3430OMIM:137800Reactome:R-HSA-1227986
Alternative Names	Receptor tyrosine-protein kinase erbB-2
Function	Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for ligand binding, Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone, GP30 is a potential ligand for this receptor, Regulates outgrowth and stabilization of peripheral microtubules (MTs), Upon ERBB2 activation, the MEMO1-RHOA-DIAPH1 signaling pathway elicits the phosphorylation and thus the inhibition of GSK3B at cell membrane, This prevents the phosphorylation of APC and CLASP2, allowing its association with the cell membrane, In turn, membrane-bound APC allows the localization of MACF1 to the cell membrane, which is required for microtubule capture and stabilization,
Cellular Localization	Cell membrane
Post-translational Modifications	Autophosphorylated, Autophosphorylation occurs in trans, i,e, one subunit of the dimeric receptor phosphorylates tyrosine residues on the other subunit (Probable), Ligand-binding increases phosphorylation on tyrosine residues ,