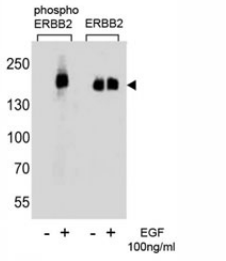
Phospho-ErbB2 (pY1127) Antibody / Signaling Site (F48692)

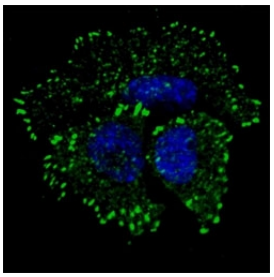
Catalog No.	Formulation	Size
F48692-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48692-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

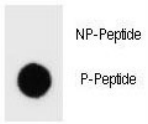
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	P04626
Applications	Western blot: 1:1000-5000 Immunofluorescence: 1:100 Dot blot: 1:500
Limitations	This Phospho-ErbB2 (pY1127) Antibody / Signaling Site is available for research use only.



Phospho-ErbB2 (pY1127) Antibody EGF-Stimulated WB. Western blot analysis of human A431 cell lysates treated with or without EGF (100 ng/ml) using Phospho-ErbB2 (pY1127) Antibody detects a band at approximately 185 kDa in EGF-stimulated samples, consistent with the predicted molecular weight of phosphorylated ErbB2 / HER2, while untreated samples show reduced signal; parallel detection with a nonphospho ErbB2 antibody confirms total receptor expression across conditions, supporting phosphorylation-dependent signaling at Tyr1127.



Phospho-ErbB2 (pY1127) Antibody MCF-7 IF. Immunofluorescence analysis of MCF-7 cells using Phospho-ErbB2 (pY1127) Antibody (green) demonstrates prominent punctate cytoplasmic staining with peripheral membranous enrichment, consistent with phosphorylated ErbB2 / HER2 localization during active signaling, while nuclei are counterstained blue.



Phospho-ErbB2 (pY1127) Antibody Dot Blot Specificity. Dot blot analysis of Phospho-ErbB2 (pY1127) Antibody demonstrates strong signal for the phosphorylated peptide and no detectable binding to the corresponding non-phosphorylated peptide, confirming phospho-specific recognition of ErbB2 / HER2 at Tyr1127. Approximately 50 ng of phospho-peptide or non-phospho peptide was applied per spot.

Description

ErbB2 receptor tyrosine kinase 2 (ERBB2), also known as HER2, is a transmembrane receptor that regulates cell proliferation, survival, and differentiation through activation of intracellular signaling pathways. Phospho-ErbB2 (pY1127) antibody, also referred to as phospho-HER2 antibody and phospho-ERBB2 antibody in the literature, detects phosphorylation at tyrosine 1127, a residue located within the intracellular signaling domain of HER2.

Phosphorylation of HER2 at multiple tyrosine residues creates a coordinated signaling network that enables activation and propagation of downstream pathways. Y1127 is positioned within this network and contributes to receptor-mediated signaling following activation. While not considered a primary activation site, phosphorylation at this residue reflects active participation in the broader HER2 signaling cascade.

Upon receptor activation, HER2 undergoes autophosphorylation at several intracellular residues that collectively regulate signaling intensity and pathway engagement. Sites such as Y1112 and Y1139 are associated with adaptor recruitment and signal organization, while residues such as Y1221 and Y1222 contribute to propagation of signaling. Y1127 functions within this continuum, supporting transmission of signals from the activated receptor to downstream effectors.

HER2 signaling plays a central role in tumor biology, particularly in cancers characterized by ERBB2 amplification such as breast carcinoma. In these contexts, phosphorylation at residues including Y1127 is associated with active signaling states that support tumor cell proliferation and survival. Detection of this phosphorylation event provides insight into receptor signaling activity within the broader phosphorylation network.

Y1127 functions alongside nearby residues including Y1112, Y1139, Y1221, Y1222, and Y1248, which together regulate the progression of HER2 signaling from initiation through sustained activation. Analysis of phosphorylation at Y1127 complements detection of these other sites and contributes to a more complete understanding of HER2 signaling dynamics.

Phospho-specific detection of ERBB2 at Y1127 enables investigation of receptor signaling activity across multiple stages of pathway engagement. This supports studies focused on signaling behavior, pathway coordination, and receptor-driven cellular responses.

For detection of activated HER2 phosphorylation, see our HER2 phospho antibody (pY1248).

Application Notes

Titration of the Phospho-ErbB2 (pY1127) Antibody / Signaling Site may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This Phospho-ErbB2 (pY1127) Antibody was produced from rabbits immunized with a KLH conjugated synthetic phospho-peptide corresponding to amino acid residues surrounding pY1127 of human HER2/ERBB2.

Storage

Aliquot the Phospho-ErbB2 (pY1127) Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Phospho-ErbB2 (pY1127) antibody, phospho-HER2 Tyr1127 antibody, ERBB2 pY1127 antibody, HER2 signaling antibody

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