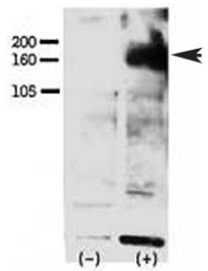
Phospho-ERBB4 (pY1162) Antibody / Activation Marker (F48403)

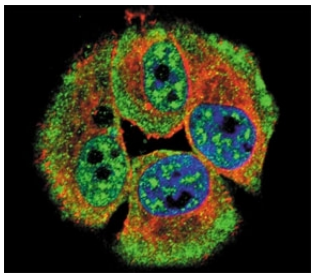
Catalog No.	Formulation	Size
F48403-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F48403-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

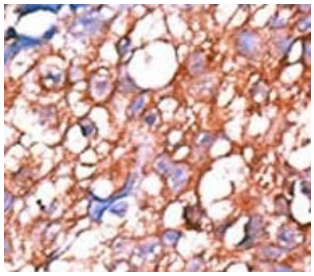
Availability	1-3 business days
Species Reactivity	Human
Predicted Reactivity	Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q15303
Applications	Western blot: 1:1000 IHC (Paraffin): 1:50-1:100 Immunofluorescence: 1:10-1:50
Limitations	This Phospho-ERBB4 (pY1162) Antibody / Activation Marker is available for research use only.



Phospho-ERBB4 (pY1162) Antibody EGF-Stimulated WB. Western blot analysis of human FG pancreatic carcinoma cell lysates treated with or without EGF (50 ng/ml, 15 min) using Phospho-ERBB4 (pY1162) Antibody detects a band at approximately 160â€“180 kDa in stimulated samples, consistent with the predicted molecular weight of phosphorylated HER4 / ERBB4, while untreated samples show reduced signal, supporting ligand-induced receptor activation at Tyr1162.



Phospho-ERBB4 (pY1162) Antibody MCF-7 IF. Immunofluorescence analysis of human MCF-7 cells stained with Phospho-ERBB4 (pY1162) Antibody (green) demonstrates cytoplasmic and peripheral membranous signal consistent with activated HER4 / ERBB4 localization, while actin filaments are labeled with phalloidin (red) and nuclei are counterstained with DAPI (blue).



Phospho-ERBB4 (pY1162) Antibody Hepatocarcinoma Tissue IHC. Immunohistochemistry analysis of FFPE human hepatocarcinoma stained with Phospho-ERBB4 (pY1162) Antibody demonstrates HRP-DAB brown membranous and cytoplasmic staining in tumor cells, consistent with activated HER4 / ERBB4 signaling, while surrounding non-tumor regions show reduced background; nuclei are counterstained blue.

Description

Receptor tyrosine-protein kinase erbB-4 (ERBB4), commonly known as HER4, is a member of the epidermal growth factor receptor family that regulates cell proliferation, differentiation, and survival through ligand-dependent signaling. Phospho-ERBB4 (pY1162) antibody detects phosphorylation at tyrosine 1162, a key residue within the intracellular domain associated with receptor activation and downstream signaling engagement.

Upon ligand binding, including neuregulins and other EGF-like growth factors, ERBB4 undergoes dimerization and autophosphorylation at multiple intracellular tyrosine residues. Phosphorylation at Y1162 reflects an activated receptor state and contributes to recruitment of signaling intermediates that drive pathways such as PI3K-AKT, MAPK, and JAK-STAT. Detection of this phosphorylation event provides a direct measure of HER4 activation rather than total receptor expression.

ERBB4 signaling is distinct among ERBB family members due to its ability to undergo regulated proteolytic cleavage, releasing an intracellular domain that can translocate to the nucleus and participate in transcriptional regulation. Activation-dependent phosphorylation plays an important role in modulating these signaling outcomes and cellular responses.

In cancer biology, HER4 activation has been implicated in both tumor-promoting and differentiation-associated processes depending on cellular context and isoform expression. Phosphorylation at Y1162 is therefore useful for evaluating receptor activation status in epithelial tumors, including breast carcinoma, as well as in growth factor-driven signaling studies.

Phospho-specific detection using this antibody is commonly applied in western blot and immunodetection assays following ligand stimulation, where increased signal intensity corresponds to activation of HER4 signaling pathways. This enables analysis of pathway engagement and dynamic signaling responses.

Additional HER4 phosphorylation sites, including pY1188, may be analyzed to further characterize signaling regulation and receptor activity across different biological conditions.

For detection of total HER4 expression, see our HER4 antibody page.

Application Notes

Titration of the Phospho-ERBB4 (pY1162) Antibody / Activation Marker may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

This Phospho-ERBB4 (pY1162) Antibody was produced from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding pY1162 of human ERBB4.

Storage

Aliquot the Phospho-ERBB4 (pY1162) Antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Phospho-ERBB4 Tyr1162 antibody, phospho-HER4 pY1162 antibody, ERBB4 phosphorylation antibody, HER4 activation antibody, phospho ERBB4 antibody

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