Anti-Phospho-HER3/ErbB3 (Y1222) Antibody [JE51-89]

ET7110-10

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 148 kDa.
Clone number:	JE51-89

Description: The EGF receptor family comprises several related receptor tyrosine kinases that are frequently overexpressed in a variety of carcinomas. Members of this receptor family include EGFR (HER1), Neu (ErbB-2, HER2), ErbB-3 (HER3) and ErbB-4 (HER4), which form either homodimers or heterodimers upon ligand binding. Full length ErbB-3 is overexpressed in human mammary tumors. The ErbB-3 gene also produces several alternative variants, including a secreted form which negatively regulates heregulin stimulated ErbB activation. ErbB-3 heterodimerizes with Neu and binds heregulin in order to activate phosphoinositide (PI) 3-kinase. The recruitment and activation of PI 3-kinase occurs via its interaction with phosphorylated YXXM motifs in the carboxy terminus of ErbB-3.

Immunogen: Synthetic phosphopeptide corresponding to a region surrounding Tyrosine 1222 of Human ErbB3.

Positive control: MCF7 serum starved for 6 hours then add 10nM Neuregulin-1 for 10 minutes cell lysate, human thyroid tissue, human skin tissue, human placenta tissue.

Subcellular location: Cell membrane, secreted.

Database links: SwissProt: P21860 Human

Recommended Dilutions:

WB	1:500-1:1,000
IHC-P	1:50-1:200

Storage Buffer: 1*TBS (pH7.4), 0.05% BSA, 40% Glycerol. Preservative: 0.05% SodiumAzide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

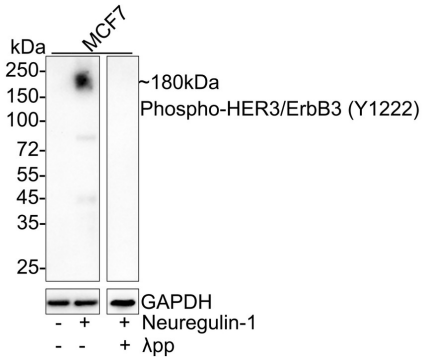

Fig1: Western blot analysis of Phospho-HER3/ErbB3 (Y1222) on different lysates with Rabbit anti-Phospho-HER3/ErbB3 (Y1222) antibody (ET7110-10) at 1/1,000 dilution.

Lane 1: MCF7 cell lysate
Lane 2: MCF7 serum starved for 6 hours then add 10nM Neuregulin-1 for 10 minutes cell lysate
Lane 3: MCF7 serum starved for 6 hours then add 10nM Neuregulin-1 for 10 minutes cell lysate, then the membrane treated with λpp for 1 hour

Lysates/proteins at 20 µg/Lane.

Predicted band size: 148 kDa
Observed band size: 180 kDa

Exposure time: 2 minutes 37 seconds; ECL: K1802;
4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (ET7110-10) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

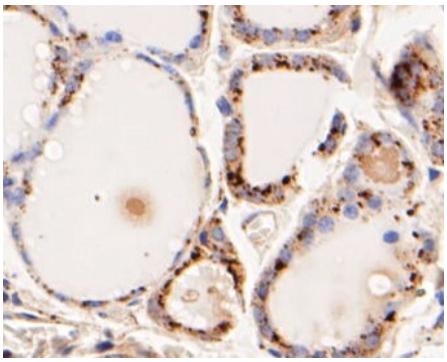

Fig2: Immunohistochemical analysis of paraffin-embedded human thyroid tissue using anti-Phospho-HER3/ErbB3 (Y1222) antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET7110-10, 1/100) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

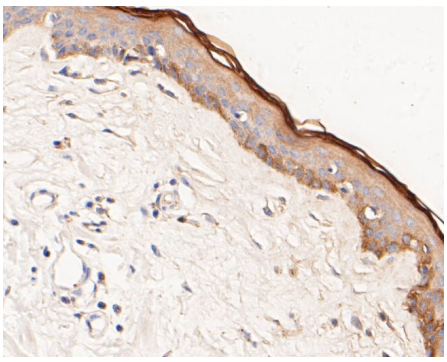

Fig3: Immunohistochemical analysis of paraffin-embedded human skin tissue using anti-Phospho-HER3/ErbB3 (Y1222) antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET7110-10, 1/100) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

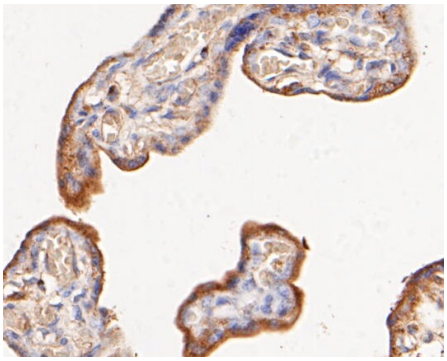

Fig4: Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-Phospho-HER3/ErbB3 (Y1222) antibody. The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 8.0-8.4) for 20 minutes.The tissues were blocked in 5% BSA for 30 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (ET7110-10, 1/100) for 30 minutes at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Sağsöz H. et. al. Expression and localisation of epidermal growth factor receptors and their ligands in the lower genital tract of cycling cows. Reprod Fertil Dev. 2019 Jul 4.
2. Dietrich M. et. al. Protein kinase C regulates ErbB3 turnover. Exp Cell Res. 2019 Jun 21.