abcam

Product datasheet

Anti-ErbB4 / HER4+ErbB2 / HER2 antibody [EPR22665-104] ab219208

Recombinant RabMAb

2 References 6 Images

Overview

Product name Anti-ErbB4 / HER4+ErbB2 / HER2 antibody [EPR22665-104]

Description Rabbit monoclonal [EPR22665-104] to ErbB2 / HER2 + ErbB4 / HER4

Host species Rabbit

Specificity ab219208 is not recommended for mouse IHC.

Tested applications Suitable for: WB, IHC-P, Indirect ELISA

Unsuitable for: Flow Cyt (Intra),ICC/IF or IP

Species reactivity Reacts with: Mouse, Human, Recombinant fragment

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HEK-293, T-47D, MCF7 and 4T1 lysates, His-tagged Recombinant Human ErbB2 protein

and His-tagged Recombinant Human ErbB4 protein. IHC-P: Human breast carcinoma tissue. I-

ELISA: Human ERBB2 Recombinant Protein and Human ERBB4 Recombinant Protein.

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

Storage buffer pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

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Purity Protein A purified

Clonality Monoclonal

Clone number EPR22665-104

Isotype IgG

Applications

The Abpromise guarantee

Our <u>Abpromise guarantee</u> covers the use of ab219208 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/1000. Predicted molecular weight: 147 kDa.
IHC-P		1/1000.
Indirect ELISA		Use at an assay dependent concentration.

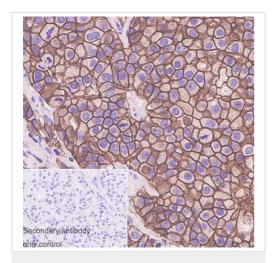
Application notes Is unsuitable for Flow Cyt (Intra),ICC/IF or IP.

Target

Cellular localization

ErbB2 / HER2: Cytoplasm. Nucleus and Cell membrane. Cytoplasm, perinuclear region. Nucleus. Translocation to the nucleus requires endocytosis, probably endosomal sorting and is mediated by importin beta-1/KPNB1. ErbB4 / HER4: Membrane and Nucleus. Following proteolytical processing E4ICD (E4ICD1 or E4ICD2 generated from the respective isoforms) is translocated to the nucleus. Significantly more E4ICD2 than E4ICD1 is found in the nucleus. E4ICD2 colocalizes with YAP1 in the nucleus.

Images

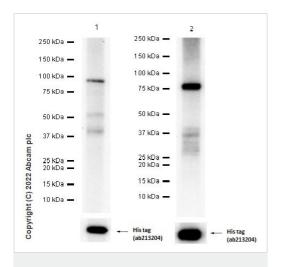


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-ErbB4 / HER4+ErbB2 / HER2 antibody [EPR22665-104] (ab219208)

Immunohistochemical analysis of paraffin-embedded Human breast carcinoma tissue labeling ErbB4 / HER4 with ab219208 at 1/1000 dilution followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP Polymer). Positive staining on the human breast carcinoma (PMID: 19239686) is observed. The section was incubated with ab219208 for 15 mins at room temperature. The immunostaining staining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP Polymer).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



Western blot - Anti-ErbB4 / HER4+ErbB2 / HER2 antibody [EPR22665-104] (ab219208)

All lanes : Anti-ErbB4 / HER4+ErbB2 / HER2 antibody [EPR22665-104] (ab219208) at 1/1000 dilution

Lane 1 : His-tagged Recombinant Human ErbB2 protein (aa676-1255)

Lane 2: His-tagged Recombinant Human ErbB4 protein (aa676-1308)

Secondary

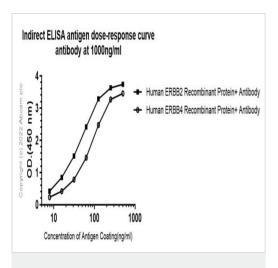
All lanes: Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000

dilution

Predicted band size: 147 kDa **Observed band size:** 80,90 kDa

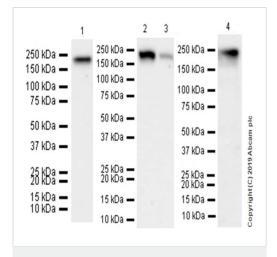
Exposure time: 180 seconds

Blocking buffer and concentration : 5% NFDM/TBST **Diluting buffer and concentration :** 5% NFDM/TBST



Indirect ELISA - Anti-ErbB4 / HER4+ErbB2 / HER2 antibody [EPR22665-104] (ab219208)

Indirect ELISA analysis of Human ERBB2 Recombinant Protein and Human ERBB4 Recombinant Protein at varying antigen concentrations of 500-0 ng/ml using ab219208 at 1000 ng/mL and secondary antibody Goat Anti-Rabbit lgG H&L (HRP) at 1/50000 dilution. Substrate solution was 3,3',5,5'-Tetramethylbenzidine (TMB).



Western blot - Anti-ErbB4 / HER4+ErbB2 / HER2 antibody [EPR22665-104] (ab219208)

All lanes : Anti-ErbB4 / HER4+ErbB2 / HER2 antibody [EPR22665-104] (ab219208) at 1/1000 dilution

Lane 1 : HEK-293 (human embryonic kidney epithelial cell) whole cell lysate

Lane 2 : T-47D (human ductal breast epithelial tumor epithelial cell) whole cell lysate

Lane 3 : MCF7 (human breast adenocarcinoma epithelial cell) whole cell lysate

Lane 4: 4T1 (mouse mammary gland carcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/100000 dilution

Predicted band size: 147 kDa

Observed band size: 180 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST

The molecular weight observed is consistent with what has been described in the literature (PMID: 22761786) Lane 4 was developed using a higher sensitivity ECL substrate.

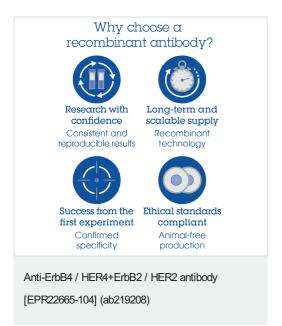
Exposure time: Lane 1:70 seconds; Lanes 2-3:48 seconds; Lane 4: 3 minutes.

Indirect ELISA antibody dose-response curve antigen at 1000 ng/ml

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Indirect ELISA - Anti-ErbB4 / HER4+ErbB2 / HER2 antibody [EPR22665-104] (ab219208)

ELISA analysis of Human ERBB4 recombinant protein at 1000 ng/mL with ab219208. An Alkaline Phosphatase-conjugated AffiniPure Goat Anti-Rabbit lgG (H+L) at 1/2500 dilution was used as the secondary antibody.



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