abcam

## Product datasheet

# Anti-ErbB3 / HER3 antibody [EPR22669-25] ab255607

Recombinant RabMAb

1 References 8 Images

### Overview

| | |
|---|---|
| **Product name** | Anti-ErbB3 / HER3 antibody [EPR22669-25] |
| **Description** | Rabbit monoclonal [EPR22669-25] to ErbB3 / HER3 |
| **Host species** | Rabbit |
| **Tested applications** | **Suitable for:** WB, IHC-P, Flow Cyt (Intra)<br>**Unsuitable for:** ICC/IF,IHC-Fr or IP |
| **Species reactivity** | **Reacts with:** Mouse, Human |
| **Immunogen** | Synthetic peptide. This information is proprietary to Abcam and/or its suppliers. |
| **Positive control** | WB: MCF7, 4T1, SK-BR-3 and T-47D whole cell lysate. Mouse stomach and skin tissue lysate. IHC-P: Human bladder cancer and breast cancer tissue. Mouse skin tissue. Flow Cyt (intra): MCF7 cells. |
| **General notes** | This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br>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<br>Preservative: 0.01% Sodium azide<br>Constituents: PBS, 40% Glycerol, 0.05% BSA |
| **Purity** | Protein A purified |
| **Clonality** | Monoclonal |
| **Clone number** | EPR22669-25 |

**Isotype** IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab255607 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: 148 kDa.<br>**Fresh lysates are needed for western blot.** |
| **IHC-P** | | 1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. |
| **Flow Cyt (Intra)** | | 1/50. |

**Application notes** Is unsuitable for ICC/IF,IHC-Fr or IP.

## Target

**Function** Binds and is activated by neuregulins and NTAK.

**Tissue specificity** Epithelial tissues and brain.

**Involvement in disease** Defects in ERBB3 are the cause of lethal congenital contracture syndrome type 2 (LCCS2) [MIM:607598]; also called Israeli Bedouin multiple contracture syndrome type A. LCCS2 is an autosomal recessive neurogenic form of a neonatally lethal arthrogryposis that is associated with atrophy of the anterior horn of the spinal cord. The LCCS2 syndrome is characterized by multiple joint contractures, anterior horn atrophy in the spinal cord, and a unique feature of a markedly distended urinary bladder. The phenotype suggests a spinal cord neuropathic etiology.

**Sequence similarities** Belongs to the protein kinase superfamily. Tyr protein kinase family. EGF receptor subfamily. Contains 1 protein kinase domain.

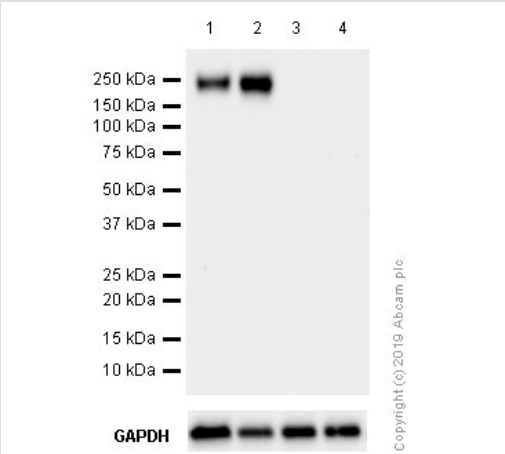
**Developmental stage** Overexpressed in a subset of human mammary tumors.

**Domain** The cytoplasmic part of the receptor may interact with the SH2 or SH3 domains of many signal-transducing proteins.

**Post-translational modifications** Ligand-binding increases phosphorylation on tyrosine residues and promotes its association with the p85 subunit of phosphatidylinositol 3-kinase.

**Cellular localization** Secreted and Cell membrane.

## Images




Western blot - Anti-ErbB3 / HER3 antibody [EPR22669-25] (ab255607)

**All lanes :** Anti-ErbB3 / HER3 antibody [EPR22669-25] (ab255607) at 1/1000 dilution

**Lane 1 :** MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate
**Lane 2 :** T-47D (Human ductal breast epithelial tumor epithelial cell) whole cell lysate
**Lane 3 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate
**Lane 4 :** MDA-MB-231 (Human breast adenocarcinoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

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

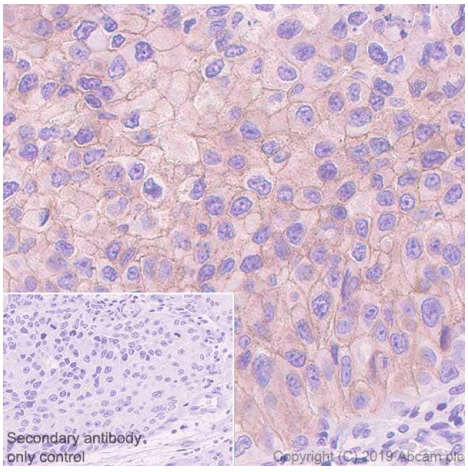
**Predicted band size:** 148 kDa

**Exposure time:** 26 seconds

**Fresh lysates are needed for western blot.**

ErbB 3 low expression cell lines: HeLa, MDA-MB-231 (PMID: 22436610, 22301547).

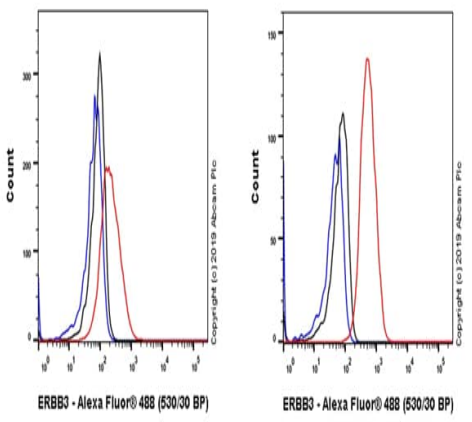
Blocking/Dilution buffer: 5% NFDM/TBST.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ErbB3 / HER3 antibody [EPR22669-25] (ab255607)

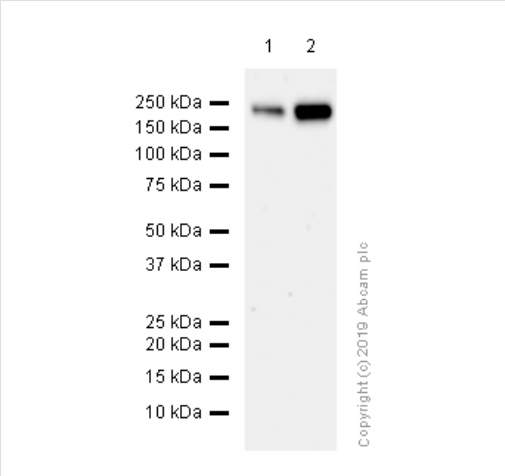
Immunohistochemical analysis of paraffin-embedded human bladder cancer tissue labeling ErbB3 / HER3 with ab255607 at 1/250 dilution (2.1 µg/ml) followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Membranous staining in human urothelial carcinoma (PMID: 23333248) is observed. Counterstained with hematoxylin. Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).




Flow Cytometry (Intracellular) - Anti-ErbB3 / HER3 antibody [EPR22669-25] (ab255607)

Intracellular flow cytometric analysis of 4% paraformaldehydefixed 90% methanolpermeabilized MDA-MB-231 (Human breast adenocarcinoma epithelial cell, Left) / MCF7 (Human breast adenocarcinoma epithelial cell, Right) cells labeling ErbB3 / HER3 with ab255607 at 1/50 dilution (1µg)/ Red compared with a Rabbit monoclonal IgG (**ab172730**) / Black isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody. **Weak expression control:** MDA-MB-231 (PMID: 25018110, 16519802).




Western blot - Anti-ErbB3 / HER3 antibody [EPR22669-25] (ab255607)

**All lanes :** Anti-ErbB3 / HER3 antibody [EPR22669-25] (ab255607) at 1/1000 dilution

**Lane 1 :** 4T1 (Mouse mammary gland carcinoma epithelial cell) whole cell lysate
**Lane 2 :** SK-BR-3 (Human breast adenocarcinoma epithelial cell) whole cell lysate

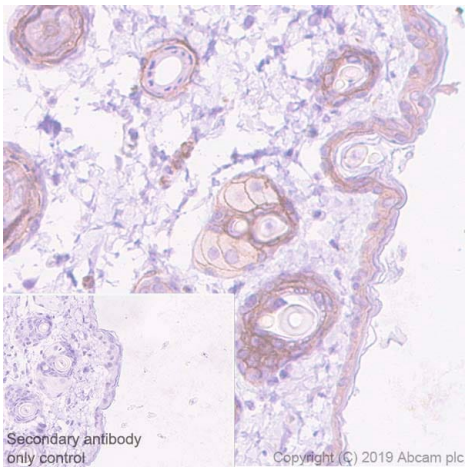
Lysates/proteins at 20 µg per lane.

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

**Predicted band size:** 148 kDa

**Exposure time:** 3 minutes

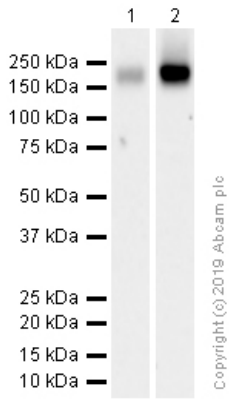
Blocking/Dilution buffer: 5% NFDM/TBST.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ErbB3 / HER3 antibody [EPR22669-25] (ab255607)

Immunohistochemical analysis of paraffin-embedded mouse skin tissue labeling ErbB3 / HER3 with ab255607 at 1/250 dilution (2.1 µg/ml) followed by a Goat Anti-Rabbit IgG H&L (HRP) ready to use. Membranous staining in mouse skin (PMID:26194695) is observed. Counterstained with hematoxylin. Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ready to use.




Western blot - Anti-ErbB3 / HER3 antibody [EPR22669-25] (ab255607)

**All lanes :** Anti-ErbB3 / HER3 antibody [EPR22669-25] (ab255607) at 1/1000 dilution

**Lane 1 :** Mouse stomach lysate
**Lane 2 :** Mouse skin lysate

Lysates/proteins at 20 µg per lane.

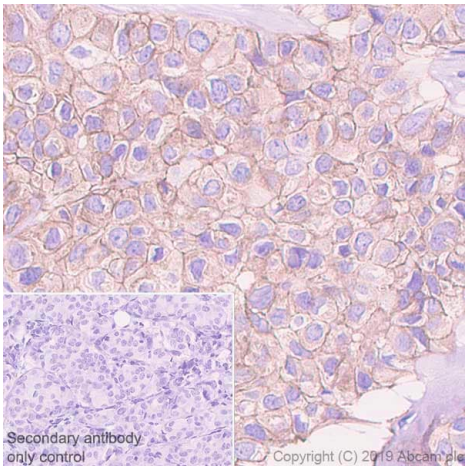
**Secondary**
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

**Predicted band size:** 148 kDa

**Exposure time:** 70 seconds

The expression profile/molecular weight observed is consistent with what has been described in the literature. PMID: 26194695 and 19690388.

Blocking/Dilution buffer: 5% NFDM/TBST.




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ErbB3 / HER3 antibody [EPR22669-25] (ab255607)

Immunohistochemical analysis of paraffin-embedded human breast cancer tissue labeling ErbB3 / HER3 with ab255607 at 1/250 dilution (2.1 µg/ml) followed by a Goat Anti-Rabbit IgG H&L (HRP) ready to use. Membranous staining in human breast carcinoma (PMID: 24346286) is observed. Counterstained with hematoxylin. Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).


Anti-ErbB3 / HER3 antibody [EPR22669-25]

(ab255607)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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