**Product datasheet**

**Anti-ErbB 3 antibody [E186] ab32121**

Rabbit monoclonal [E186] to ErbB 3

**Host species**
Rabbit

**Specificity**
ab32121 recognises ErbB3/HER3. WB samples: should avoid boiling

**Tested applications**
Suitable for: WB
Unsuitable for: ICC/IF, IHC or IP

**Species reactivity**
Reacts with: Rat, Human

**Immunogen**
Synthetic peptide within Human ErbB 3 aa 1300 to the C-terminus (C terminal). The exact sequence is proprietary.

Database link: P21860

**Positive control**
MCF-7 cell lysate.

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

We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.

This product is a recombinant rabbit monoclonal antibody.

**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. Avoid freeze / thaw cycle.

**Storage buffer**
pH: 7.40
Preservative: 0.01% Sodium azide
Constituents: 40% Glycerol, 0.05% BSA, 59% PBS

**Purity**
Protein A purified
Clonality: Monoclonal
Clone number: E186
Isotype: IgG

Applications

Our Abpromise guarantee covers the use of ab32121 in the following tested applications.
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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<th>Application</th>
<th>Abreviews</th>
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<td>WB</td>
<td>1/500 - 1/1000. Detects a band of approximately 185 kDa (predicted molecular weight: 149 kDa).</td>
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Application notes: Is unsuitable for ICC/IF, IHC 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
Lane 1: Wild-type HAP1 whole cell lysate (20 µg)
Lane 2: ERBB3 knockout HAP1 whole cell lysate (20 µg)
Lane 3: MCF7 whole cell lysate (20 µg)

Lanes 1 - 3: Merged signal (red and green). Green - ab32121 observed at 185 kDa. Red - loading control, ab9484, observed at 37 kDa.

ab32121 was shown to specifically recognize ERBB3 in wild-type HAP1 cells along with additional cross-reactive bands. No band was observed when knock out samples were examined. Wild-type and ERBB3 knockout samples were subjected to SDS-PAGE. Ab32121 and ab18058 (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1/500 dilution and 1/20,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (ab216776) secondary antibodies at 1/20,000 dilution for 1 hour at room temperature before imaging.

Anti-ErbB 3 antibody [E186] (ab32121) at 1/1000 dilution + MDA-MB-435S (human ductal carcinoma) whole cell lysate at 10 µg

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

Predicted band size: 149 kDa
Western blot - Anti-ErbB 3 antibody [E186] (ab32121)

All lanes: Anti-ErbB 3 antibody [E186] (ab32121) at 2.685 µg/ml (purified)

Lane 1: MDA-MB-435S (human mammary gland ductal carcinoma melanocyte) whole cell lysate
Lane 2: C6 (Rat glial tumor glial cell) whole cell lysate
Lane 3: Rat brain 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: 149 kDa

Exposure time: 37 seconds

Anti-ErbB 3 antibody [E186] (ab32121) at 1/500 dilution (unpurified) + MCF-7 cell lysate

Predicted band size: 149 kDa
Observed band size: 185 kDa

why is the actual band size different from the predicted?

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

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