

## Product datasheet

### Anti-ErbB3 / HER3 antibody [SP71] ab93739

Recombinant **RabMAb**

[1 Abreviews](#) [8 References](#) [7 Images](#)

#### Overview

<b>Product name</b>	Anti-ErbB3 / HER3 antibody [SP71]
<b>Description</b>	Rabbit monoclonal [SP71] to ErbB3 / HER3
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P, mIHC, Flow Cyt (Intra)
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human ErbB3/ HER3 aa 650-750 (internal sequence). The exact sequence is proprietary. Database link: <a href="#">P21860</a>
<b>Positive control</b>	Flow Cyt (Intra): MCF7 cells. IHC: human small intestine tissue. mIHC: Human colon and jejunum tissue.
<b>General notes</b>	<b>This product is FOR RESEARCH USE ONLY. For commercial use, please contact <a href="mailto:partnerships@abcam.com">partnerships@abcam.com</a>.</b>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.60 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
<b>Purity</b>	Protein A/G purified
<b>Purification notes</b>	Purified from TCS by protein A/G.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	SP71
<b>Isotype</b>	IgG

#### Applications

## The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab93739 in the following tested applications.

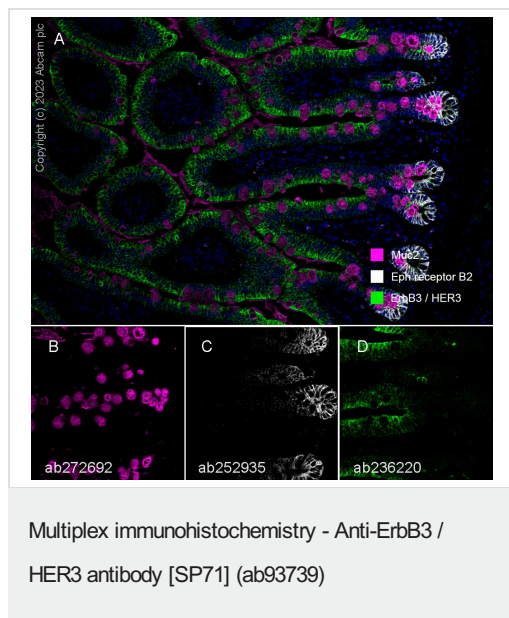
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. 1/100 for 30 mins at RT. Perform heat mediated antigen retrieval before commencing with IHC staining protocol by boiling tissue section in 1mM EDTA, pH 8.0 for 10 min followed by cooling at RT for 20 min.
mlHC		Use at an assay dependent concentration.
Flow Cyt (Intra)		1/50.

## 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



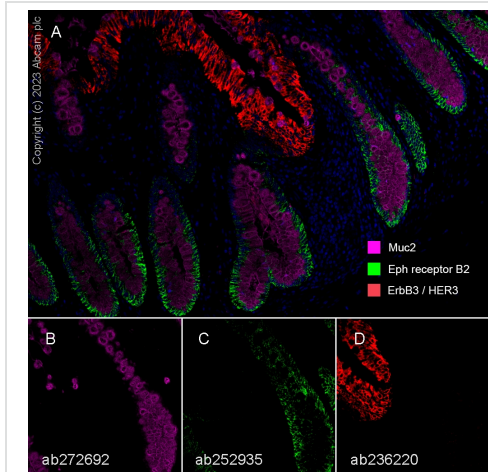
Fluorescence multiplex immunohistochemical analysis of the human jejunum (Formalin/PFA-fixed paraffin-embedded sections).

Panel A: merged staining of anti-Muc2 (**ab272692**, magenta; Opal™690), anti-Eph receptor B2 (**ab252935**, green; Opal™520) and anti-ErbB3 / HER3 (**ab236220**, red; Opal™570) on human jejunum. Panel B: anti-Muc2 stained on goblet cells. Panel C: anti-Eph receptor B2 stained on intestinal stem and progenitor cells. Panel D: anti-ErbB3 / HER3 stained on epithelial cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody.

The section was incubated in three rounds of staining: in the order of **ab272692** at 1/2000 dilution (0.252 µg/ml), **ab252935** at 1/1000 dilution (0.527 µg/ml), and **ab236220** at 1/3000 dilution (0.75 µg/ml) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain.



Multiplex immunohistochemistry - Anti-ErbB3 / HER3 antibody [SP71] (ab93739)

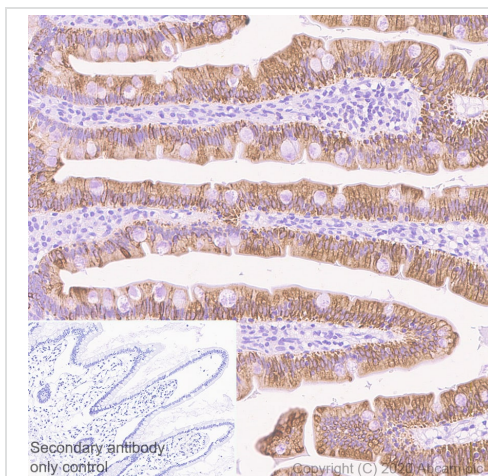
Fluorescence multiplex immunohistochemical analysis of the human colon (Formalin/PFA-fixed paraffin-embedded sections).

Panel A: merged staining of anti-Muc2 ([ab272692](#), magenta; Opal™690), anti-Eph receptor B2 ([ab252935](#), green; Opal™520) and anti-ErbB3 / HER3 ([ab236220](#), red; Opal™570) on human colon. Panel B: anti-Muc2 stained on goblet cells. Panel C: anti-Eph receptor B2 stained on intestinal stem and progenitor cells. Panel D: anti-ErbB3 / HER3 stained on epithelial cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody.

The section was incubated in three rounds of staining: in the order of [ab272692](#) at 1/2000 dilution (0.252 µg/ml), [ab252935](#) at 1/1000 dilution (0.527 µg/ml), and [ab236220](#) at 1/3000 dilution (0.75 µg/ml) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument with an Opal™ 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain.

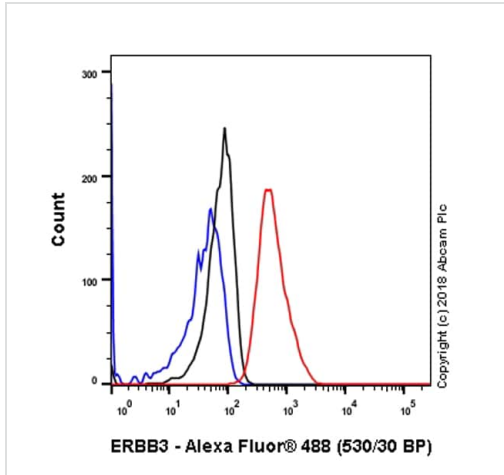


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ErbB3 / HER3 antibody [SP71] (ab93739)

Membranous staining on paraffin-embedded sections of human small intestine. The section was incubated with ab93739 at 1:100 dilution (0.7 µg/ml) for 30 mins at room temperature. The secondary antibody staining was achieved with Rabbit specific IHC polymer detection kit HRP/DAB ([ab209101](#)). Hematoxylin was used as a counter stain.

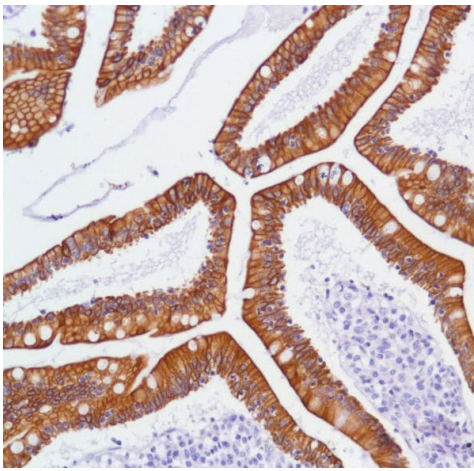
Heat mediated antigen retrieval was performed with Citrate buffer (pH 6.0, epitope retrieval solution1) for 20 mins.

The immunostaining was performed on a Leica Biosystems BOND® RX instrument.



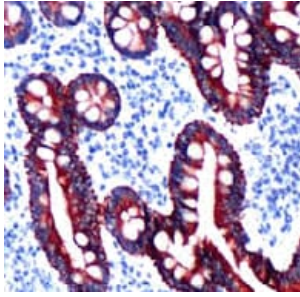
Flow Cytometry (Intracellular) - Anti-ErbB3 / HER3 antibody [SP71] (ab93739)

Flow cytometry analysis of MCF7 (human breast adenocarcinoma epithelial cell) labeling ErbB3 / HER3 with purified ab93739 at 1/50 dilution (10.5 µg/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) at 1/2000 dilution was used as a secondary antibody. Isotype control -Rabbit monoclonal IgG ([ab172730](#)) / Black. Unlabeled control -Unlabelled cells / blue.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ErbB3 / HER3 antibody [SP71] (ab93739)

An immunohistochemical staining of human small intestine labelling ErbB3 / HER3 (SP71) with ab93739 at dilution 1:100.



ab93739 at 1/100 dilution staining ErbB 3 in formalin-fixed, paraffin-embedded Human small intestine tissue.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ErbB3 / HER3 antibody [SP71] (ab93739)

#### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-ErbB3 / HER3 antibody [SP71] (ab93739)

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

#### Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors