

# ErbB4 Monoclonal Antibody (H4.72.8 (Ab72))

Product Details	
Size	500 µL
Species	Human, Mouse
Published Species	Ferret, Rat, Human
Expression System	Mouse / IgG2a
Class	Monoclonal
Type	Antibody
Clone	H4.72.8 (Ab72)
Conjugate	Unconjugated
Immunogen	Extracellular domain of recombinant human c-erbB-4/HER-4 oncoprotein
Form	Liquid
Concentration	0.2 mg/mL
Purification	Protein A
Storage buffer	PBS, pH 7.4, with 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C
RRID	AB_10990351

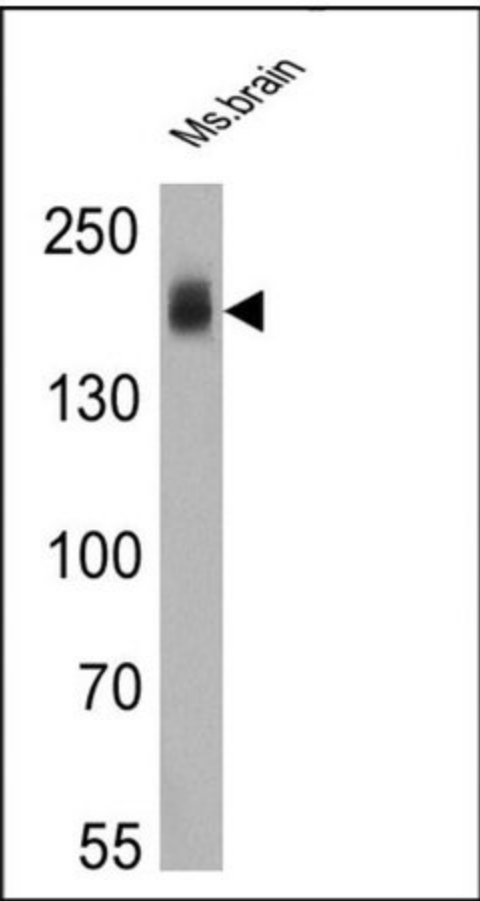
Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.5 µg/test	1 Publication
Western Blot (WB)	1:50-1:500	1 Publication
Immunocytochemistry (ICC)	-	3 Publications
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunohistochemistry (IHC)	-	2 Publications
Immunoprecipitation (IP)	-	1 Publication
Neutralization (Neu)	-	8 Publications

## Product Specific Information

MA5-13016 targets HER-4 in WB, FACS applications and shows reactivity with Human and Mouse samples.

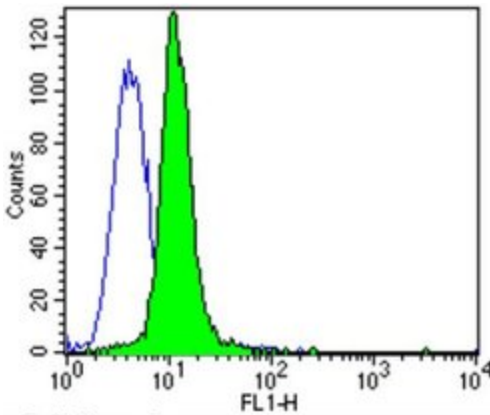
The MA5-13016 immunogen is extracellular domain of recombinant human c-erbB-4/HER-4 oncoprotein.

## Product Images For ErbB4 Monoclonal Antibody (H4.72.8 (Ab72))



#### ErbB4 Antibody (MA5-13016) in WB

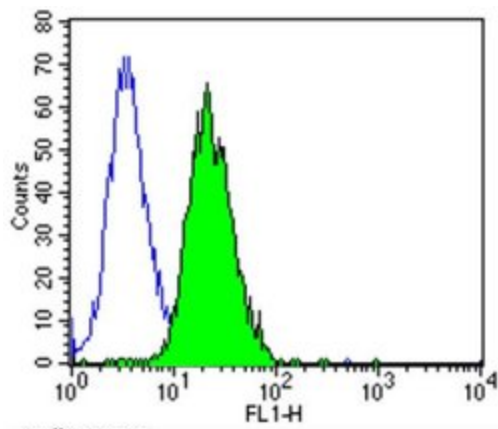
Western blot analysis of HER-4 was performed by loading 25 µg of mouse brain cell lysates onto an SDS polyacrylamide gel. Proteins were transferred to a PVDF membrane and blocked at 4°C overnight. The membrane was probed with a HER-4 monoclonal antibody (Product # MA5-13016) at a dilution of 1:100 overnight at 4°C, washed in TBST, and probed with an HRP-conjugated secondary antibody for 1 hr at room temperature in the dark. Chemiluminescent detection was performed using Pierce ECL Plus Western Blotting Substrate (Product # 32132). Results show a band at ~180 kDa.



#### ErbB4 Antibody (MA5-13016) in Flow

Flow cytometry analysis of HER-4 in Neuro-2a cells (green) compared to an isotype control (blue). Cells were harvested, adjusted to a concentration of  $1-5 \times 10^6$  cells/mL, fixed with 2% paraformaldehyde and washed with PBS. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with a HER-4 monoclonal antibody (Product # MA5-13016) at a dilution of 0.5 µg/test for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated goat anti-mouse IgG (H+L) secondary antibody and re-suspended in PBS for FACS analysis.

Cell: Neuro-2a  
 Concentration: 0.5µg/test (100µl)  
 Theory location: Membrane/Cytoplasm



### ErbB4 Antibody (MA5-13016) in Flow

Flow cytometry analysis of HER-4 in MCF-7 cells (green) compared to an isotype control (blue). Cells were harvested, adjusted to a concentration of  $1-5 \times 10^6$  cells/mL, fixed with 2% paraformaldehyde and washed with PBS. Cells were blocked with a 2% solution of BSA-PBS for 30 min at room temperature and incubated with a HER-4 monoclonal antibody (Product # MA5-13016) at a dilution of 0.5  $\mu\text{g}/\text{test}$  for 60 min at room temperature. Cells were then incubated for 40 min at room temperature in the dark using a Dylight 488-conjugated goat anti-mouse IgG (H+L) secondary antibody and re-suspended in PBS for FACS analysis.

Cell: MCF-7  
Concentration: 0.5  $\mu\text{g}/\text{test}$  (100  $\mu\text{l}$ )  
Theory location: Membrane/Cytoplasm

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## Immunohistochemistry (2)

### Histopathology

#### Immunohistochemical analysis of the monoclonal antibody 4B5 in breast tissue expressing human epidermal growth factor receptor 4 (HER4).

"MA5-13016 was used in immunohistochemistry to study the utility of the 4B5 monoclonal antibody for clinical HER2 status determination in breast tissue expressing HER4"

Authors: Jay JI,Brunhoeber PS,Smith MH,Williams RR,Sugarman MC,Free HL,Tast DE

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2013

### The Journal of neuroscience : the official journal of the Society for Neuroscience

#### Neuregulin directly decreases voltage-gated sodium current in hippocampal ErbB4-expressing interneurons.

"MA5-13016 was used in immunohistochemistry to study the direct effects of neuregulin on voltage-gated sodium channel activity of hippocampal interneurons expressing ErbB4"

Authors: Janssen MJ,Leiva-Salcedo E,Buonanno A

**Species**  
Rat

**Dilution**  
1:1000

**Year**  
2012

## Immunohistochemistry (Frozen) (1)

### BMC neuroscience

#### Time course and progression of wild type -synuclein accumulation in a transgenic mouse model.

"MA5-13016 was used in immunohistochemistry - frozen section to study the time course of behavioral deficits and neuropathology in PDGF-beta human wild type alpha-synuclein transgenic mice"

Authors: Amschl D,Neddens J,Havas D,Flunkert S,Rabl R,Römer H,Rockenstein E,Maslah E,Windisch M,Hutter-Paier B

**Species**  
Not Applicable

**Dilution**  
0.003 mg/ml

**Year**  
2013

## Neutralization (8)

### Cancer

#### Slow down to stay alive: HER4 protects against cellular stress and confers chemoresistance in neuroblastoma.

"MA5-13016 was used in blocking or activating experiment to study the mechanisms underlying the modulation of neuroblastoma cellular stress and chemoresistance by HER4"

Authors: Hua Y,Gorshkov K,Yang Y,Wang W,Zhang N,Hughes DP

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2012

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## More applications with references on thermofisher.com

ICC (3)   WB (1)   IP (1)   Flow (1)

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