

# Product Information

## Recombinant Anti-Human erbb4 Antibody

Cat. No.: **MOM-18378**

This product is for research use only and is not intended for diagnostic use.

### Product Overview

Recombinant Mouse Antibody is against Human ERBB4, expressed in Chinese Hamster Ovary cells(CHO)

### Antigen Description

Specifically binds and is activated by neuregulins, NRG-2, NRG-3, heparin-binding EGF-like growth factor, betacellulin and NTA. Interaction with these factors induces cell differentiation. Not activated by EGF, TGF- $\alpha$ , and amphiregulin. The C-terminal fragment (CTF) of isoform JMA-A CYT-2 (containing E4ICD2) can stimulate transcription in the presence of YAP1. ERBB4 intracellular domain is involved in the regulation of cell growth. Conflicting reports are likely due at least in part to the opposing effects of the isoform-specific and nuclear-translocated ERBB4 intracellular domains (E4ICD1 and E4ICD2). Overexpression studies in epithelium show growth inhibition using E4ICD1 and increased proliferation using E4ICD2. E4ICD2 has greater in vitro kinase activity than E4ICD1. The kinase activity is required for the nuclear translocation of E4ICD2.

### Specific Activity

Tested positive against native antigen.

### Target

ERBB4

### Immunogen

Synthetic peptide: (C)RSTLQHPDYLQEYST, corresponding to amino acids 1250-1264 of HER4.(C)RSTLQHPDYLQEYST

### Source

Mouse

### Species Reactivity

Human

### Type

IgG

### Expression Host

CHO

### Purity

>95.0% as determined by analysis by SDS-PAGE.

### Applications

Suitable for use in IP, IF, FuncS, FC, Neut and most other immunological methods.

### Storage

Store at -20°C. Avoid multiple freeze/thaw cycles.

## ANTIGEN GENE INFORMATION

### Gene Name

[ERBB4 v-erb-a erythroblastic leukemia viral oncogene homolog 4 \(avian\) \[ Homo sapiens \]](#)

### Official Symbol

ERBB4

### Synonyms

ERBB4; v-erb-a erythroblastic leukemia viral oncogene homolog 4 (avian); v erb a avian erythroblastic leukemia viral oncogene homolog like 4; receptor tyrosine-protein kinase erbB-4; proto-oncogene-like protein c-ErbB-4; tyrosine kinase-type cell surface receptor HER4; avian erythroblastic leukemia viral (v-erb-b2) oncogene homolog 4; HER4; p180erbB4; MGC138404

### Gene ID

[2066](#)

### mRNA Refseq

[NM\\_001042599](#)

### Protein Refseq

[NP\\_001036064](#)

### MIM

[600543](#)

### UniProt ID

Q15303

### Chromosome Location

2q33.3-q34

### Pathway

Calcium signaling pathway, organism-specific biosystem; Calcium signaling pathway, conserved biosystem; Downregulation of ERBB4 signaling, organism-specific biosystem; Endocytosis, organism-specific biosystem; Endocytosis, conserved biosystem; ErbB signaling pathway, organism-specific biosystem; ErbB signaling pathway, organism-specific biosystem;

### Function

ATP binding; epidermal growth factor receptor binding; nucleotide binding; protein binding; protein homodimerization activity; protein tyrosine kinase activity; receptor activity; receptor signaling protein tyrosine kinase activity; transcription regulatory region DNA binding; transmembrane receptor protein tyrosine kinase activity;