

# Product Information

## MemDX™ Human ERBB3 MC-38 Cell Line

Cat. No.: **S01YF-0324-KX117**

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

### Product Information

#### Target Protein

ERBB3

#### Target Protein Species

Human

#### Host Cell Type

MC-38

#### Target Classification

Kinases/Enzyme

#### Target Family

Kinases/Enzyme

#### Target Research Area

CNS Research

#### Related Diseases

Lethal Congenital Contracture Syndrome; Visceral Neuropathy

### Product Properties

#### Assay Types

Functional assay and biological assay

#### Mycoplasma Testing

Negative

#### Biosafety Level

Level 1

#### Activity

Expression verification; tumorigenicity verification

#### Form

Frozen cells

#### Freeze Medium

70% RPMI 1640 + 20% FBS + 10% DMSO

#### **Culture Medium**

RPMI 1640 + 10% FBS

#### **Selective Antibiotic(s)**

Regular antibiotics active against mycoplasmas, bacteria and fungi.

#### **Handling Notes**

Frozen cells should be thawed immediately upon receipt and grown according to handling procedure to ensure cell viability and proper assay performance.

Note: Do not freeze the cells upon receipt as it may result in irreversible damage to the cell line.

Disclaimer: We cannot guarantee cell viability if the cells are not thawed immediately upon receipt and grown according to handling procedure.

#### **Incubation**

37°C with 5% CO<sub>2</sub>

#### **Applications**

Drug screening and biological assays

#### **Application Notes**

Cells were plated in a 384-well plate and incubated overnight at 37°C and 5% CO<sub>2</sub> to allow the cells to attach and grow. Cells were then stimulated with a control for high-throughput drugs screening and functional assays.

#### **Use Restrictions**

These cells are distributed for research use only.

#### **Shipping**

Dry ice

#### **Storage**

Liquid nitrogen

## **Target**

#### **Full Name**

Erb-b2 receptor tyrosine kinase 3

#### **Introduction**

This gene encodes a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. This membrane-bound protein has a neuregulin binding domain but not an active kinase domain. It therefore can bind this ligand but not convey the signal into the cell through protein phosphorylation. However, it does form heterodimers with other EGF receptor family members which do have kinase activity. Heterodimerization leads to the activation of pathways which lead to cell proliferation or differentiation. Amplification of this gene and/or overexpression of its protein have been reported in numerous cancers, including prostate, bladder, and breast tumors. Alternate transcriptional splice variants encoding different isoforms have been characterized. One isoform lacks the intermembrane region and is secreted outside the cell. This form acts to modulate the activity of the membrane-bound form. Additional splice variants have also been reported, but they have not been thoroughly characterized.

#### **Alternative Names**

ERBB3; HER3; FERLK; LCCS2; ErbB-3; c-erbB3; erbB3-S; MDA-BF-1; c-erbB-3; p180-ErbB3; p45-sErbB3; p85-sErbB3; receptor tyrosine-protein kinase erbB-3; human epidermal growth factor receptor 3; proto-oncogene-like protein c-ErbB-3; tyrosine kinase-type cell surface receptor HER3; v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 3; Erb-b2 receptor tyrosine kinase 3

**Gene ID**

2065

**UniProt ID**

P21860