HER3 / ErbB3 Neutralizing Antibody

Sino Biological
Biological Solution Specialist

Catalog Number: 10201-M908

General Information		
Immunogen:	Recombinant Human HER3 / ErbB3 Protein (Catalog#10201- H08H)	
Clone ID:	M908	
Ig Type:	Mouse IgG1	
Applications:	Neutralization	
Specificity:	Human HER3 / ErbB3	
Formulation:	0.2 µm filtered solution in Histidine and Arginine buffer containing 120mM NaCl, 0.02% Tween 80, pH6.0	
Storage:	< -20℃	

Character	Method	Result
Specificity	ELISA	Human HER3 / ErbB3 (Catalog#10201-H08H)
Antibody concentration	UV	> 1 mg/mL
Aggregation	SEC-HPLC	< 5% aggregation
Purity	SDS-PAGE	> 95%
Endotoxin	LAL gel clotting	< 3 EU/mg

Preparation

This antibody was obtained from a mouse immunized with purified, recombinant Human HER3 / ErbB3 (rh HER3 / ErbB3; Catalog#10201-H08H; NP_001973.2; Met1-Thr643) and was produced using recombinant antibody technology.

Specificity

Human HER3 / ErbB3

No cross-reactivity with Mouse ErbB3 (Catalog#51003-M08H) and Rat ErbB3 (Catalog#80111-R08H) in ELISA assay.

Storage

This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. **Preservative-Free.**

Sodium azide is recommended to avoid contamination (final concentration 0.05%-0.1%). It is toxic to cells and should be disposed of properly. **Avoid repeated freeze-thaw cycles.**

Applications

Block – In a functional ELISA which immobilized recombinant Human NRG1/Fc Chimera (Catalog#11609-H01H2) at 5 μ g/mL (100 μ L/well) in the plate, the Mouse Anti-Human ErBB3 Monoclonal Antibody (Catalog#10201-M908) can block the binding of 1 μ g/mL of biotinylated Human ErBB3 (Catalog#10201-H08H) to Human NRG1/Fc Chimera, the EC50 is 1.30 μ g/mL.

Neutralization – The neutralization activity of Erbb3 neutralizing antibody is Measured by its ability to neutralize NRG1- β 1/HRG1- β 1-induced proliferation in the MCF-7 human breast cancer cell line.

Background

ErbB3, also known as Her3 (human epidermal growth factor receptor3), is a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. This membrane-bound glycoprotein has a neuregulin binding domain but has not an active kinase domain., and therefore can not mediate the intracellular signal transduction through protein phosphorylation. However, its heterodimer with ErbB2 or other EGFR members responsible for tyrosine phosphorylation forms a receptor complex with high affinity, and initiates the related pathway which lead to cell proliferation or differentiation. ErbB3 has been shown to implicated in numerous cancers, including prostate, bladder, and breast tumors. This protein has different isoforms derived from alternative splicing variants, and among which, the secreted isoform lacking the intermembrane region modulates the activity of membrane-bound form.

Reference

Kraus, M.H. et al. 1989, Proc. Natl. Acad. Sci. 86: 9193-9197. Carraway, K.L. et al. 1994, J. Biol. Chem. 269: 14303 -14306. Wallasch, C. et al. 1995, EMBO. J. 14: 4267-4275. Alimandi, M. et al. 1995, Oncogene. 10:1813-1821. Gamett, D.C. et al. 1995, J. Biol. Chem. 270: 19022-19027. Katoh, M. et al. 1993, Biochem.Biophys.Res.Commun.192: 1189-97.