

ErbB2/HER2 recombinant antibody

Recombinant anti-human ErbB2/HER2 Antibody (Trastuzumab) FITC Conjugated

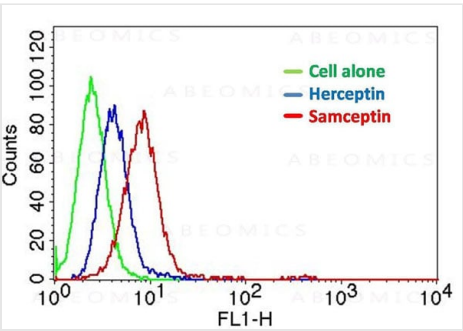
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA14887	CHO cells	Human	Functional Assay, Flow Cytometry, Functional Assay

PRODUCT SYNONYMS

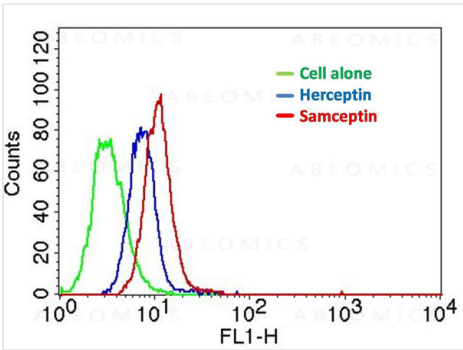
ErbB2/HER2; Monoclonal Recombinant Antibody; Recombinant anti-human ErbB2/HER2 Antibody (Trastuzumab) FITC Conjugated; Receptor tyrosine-protein kinase erbB-2; Samceptin; Trastuzumab; ErbB2/HER2 recombinant antibody

PRODUCT SPECIFICATIONS

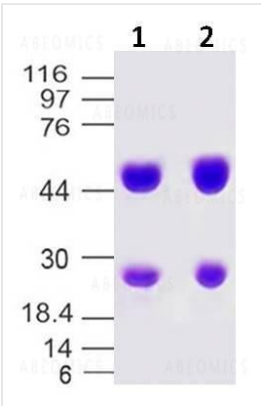
Host	CHO cells
Reactivity	Human
Clonality	Monoclonal
Clone Number	ABM2A1G1
Purity/Purification	Purity: >98.0% as determined by SEC-HPLC & SDS-PAGE
Form/Format	Purified; Tris, 0.05% azide
Applicable Applications for ErbB2/HER2 recombinant antibody	FA (Functional Assay), FCM/FACS (Flow Cytometry), ADCC (Antibody-Dependent Cellular Cytotoxicity)
Application Notes	FC/FACS: 1-2ug/10 ⁶ cells ADCC: 20-25mg/ml
Antibody Type	Recombinant Antibody
Conjugation	FITC
Amino Acid Information	PepMap Analysis of N terminal amino acids sequence: H chain: EVQLVESGGGLVQPG, L chain: DIQMTQSPSSLSASV
Product Construction	Immunoglobulin G1, anti-(human p185neu receptor) (human-mouse monoclonal rhuMab HER2 g1- chain), disulfide with human-mouse monoclonal rhuMab HER2 light chain, dimer.
Preparation and Storage	Store the conjugated antibody at 4 degree C, stable for 12 months. Shipping: Blue Ice pack



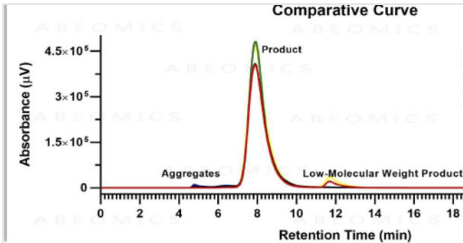
FCM (Flow Cytometry)
Figure-6: Epitope binding study by flow cytometric analysis. MCF-7 cells expressing HER2 antigen were treated with Herceptin and Samceptin (2 ug/10⁶ Cells). Surface staining was done using FITC conjugated antibodies.



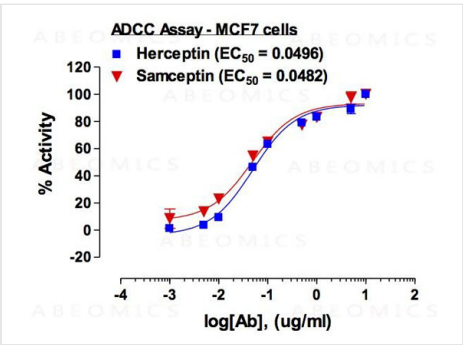
FCM (Flow Cytometry)
Figure-5: Epitope binding study by flow cytometric analysis. BT-474 cells expressing HER2 antigen were treated with Herceptin and Samceptin (2 ug/10⁶ Cells). Surface staining was done using FITC conjugated antibodies.



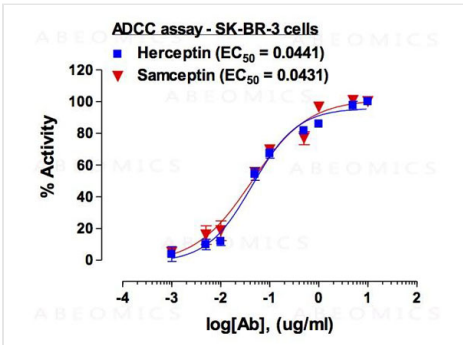
SDS-PAGE
Figure-4: Reducing SDS-PGE of Samceptin (Lane-1) in comparison with Herceptin (Lane-2). Lanes were overloaded to show the presence of any other protein bands than Samceptin. Both heavy and light chains are well separated.



Activity
Figure-3: SEC-HPLC analysis of Herceptin and Samceptin. Based on this analysis, Samceptin is highly pure and purity estimated to be >98%



Activity
Figure-2: Antiproliferative activity of Samceptin was assayed in comparison with Herceptin using ADCC Reporter Bioassay Kit from Promega in MCF-7 cells. Result indicated that Samceptin potency is at par with Herceptin.



Activity
Figure-1: Antiproliferative activity of Samceptin was assayed in comparison with Herceptin using ADCC Reporter Bioassay Kit in SK-BR-3 cells. Result indicated that Samceptin potency is at par with Herceptin.

ADDITIONAL INFORMATION

Related Product Information for ErbB2/HER2 recombinant antibody	The drug Trastuzumab is a monoclonal antibody and works by targeting breast cancer cells that overexpress the HER2 protein. Overexpression (or amplification) of the HER2 protein is associated with accelerated cell division. By binding to the protein receptors on these cells, Trastuzumab interrupts the growth signal, thereby slowing the growth and spread of tumors. Approximately 20% of breast cancers overexpress the HER2 protein. Amplification of HER2 in breast cancer cells has been correlated with adverse prognostic factors such as large tumor size, high nuclear grade, and decreased expression of estrogen and progesterone hormone receptors. HER2 amplification has also been associated with reduced disease-free survival, and overall survival, for women with node-positive or node negative disease. Trastuzumab (anti-p185, rhuMab HER2), which is a humanized monoclonal antibody that binds to the HER2 protein. HER-2 is a transmembrane spanning receptor-like protein, which is structurally related to the epidermal growth factor receptor and has been shown to inhibit the proliferation of human tumor cells that overexpress HER2 both in vitro and in vivo. The developed biosimilar to Herceptin, designated as Samceptin. The biochemical characterizations and the functional assays suggest that Samceptin is highly similar in structure and activity to Herceptin.
Product Categories/Family for ErbB2/HER2 recombinant antibody	Recombinant Rabbit Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	54792098
NCBI GeneID	2064
NCBI Accession #	NP_001005862.1
NCBI GenBank Nucleotide #	NM_001005862.1
UniProt Accession #	P04626 ; Q14256 ; Q6LDV1 ; Q9UMK4 ; B2RZG3 ; B4DHN3
Molecular Weight	137,910 Da
NCBI Official Full Name	receptor tyrosine-protein kinase erbB-2 isoform b
NCBI Official Synonym Full Names	v-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian)
NCBI Official Symbol	ERBB2
NCBI Official Synonym Symbols	NEU; NGL; HER2; TKR1; CD340; HER-2; MLN 19; HER-2/neu
NCBI Protein Information	receptor tyrosine-protein kinase erbB-2; herstatin; p185erbB2; proto-oncogene Neu; c-erb B2/neu protein; proto-oncogene c-ErbB-2; metastatic lymph node gene 19 protein; tyrosine kinase-type cell surface receptor HER2; neuroblastoma/glioblastoma derived on
UniProt Protein Name	Receptor tyrosine-protein kinase erbB-2
UniProt Gene Name	ERBB2
UniProt Synonym Gene Names	HER2; MLN19; NEU; NGL; MLN 19
UniProt Entry Name	ERBB2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/monoclonal/erbb2-her2-recombinant-antibody-clone-abm2a1g1-functional-assay-flow-cytometry-antibody-dependent-cellular-cytotoxicity-elisa/14887>