

Product datasheet for **AM50283PU-T**

Her2 (ERBB2) Mouse Monoclonal Antibody [Clone ID: HRB2/718]

Product data:

Product Type:	Primary Antibodies
Clone Name:	HRB2/718
Applications:	FC, IF, IHC, IP
Recommended Dilution:	ELISA: For coating, order Ab without BSA. Flow Cytometry: 0.5-1 µg/million cells. Immunofluorescence: 0.5-1 µg/ml. Western Blotting: 0.5-1 µg/ml for 2 hours at RT. Immunoprecipitation: 0.5-1 µg/500 µg protein lysate. Immunohistochemistry on Frozen Sections: 0.5-1 µg/ml for 30 minutes at RT. Positive Control: SKBR-3 Cells or Breast Cancers.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Recombinant human HER-2 protein.
Specificity:	Recognizes a protein of 185kDa, which is identified as c-erbB-2/HER-2/neu. Its epitope is localized in the extracellular domain. C-erbB-2/HER-2 is a member of the EGFR family. This MAb is specific and shows minimal cross-reaction with other members of the EGFR-family. Receptors of this family are located on the plasma membrane and consist of an extracellular ligand-binding domain that is connected to a large intracellular domain by a single transmembrane sequence. C-erbB-2/HER-2 protein is over-expressed in a variety of carcinomas especially those of breast and ovary. Cellular Localization: Cell surface.
Formulation:	10mM PBS State: Purified State: Liquid purified IgG fraction from Bioreactor Concentrate Stabilizer: 0.05% BSA Preservative: 0.05% Sodium Azide
Concentration:	lot specific
Purification:	Protein A/G Chromatography



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Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	185 kDa
Gene Name:	erb-b2 receptor tyrosine kinase 2
Database Link:	Entrez Gene 2064 Human P04626

Background: The c-erbB-2 (HER-2/neu) proto-oncogene encodes a 185 kDa transmembrane receptor protein. It has partial homology with the epidermal growth factor receptor and shares intrinsic tyrosine kinase activity with that receptor. C-erbB-2 heterodimerize with the EGF receptor, erbB-3 receptor, and the erbB-4 receptor. HER- 2/neu was originally identified as a transforming oncogene in chemically induced rat neuroglioblastomas, where a single point mutation in the transmembrane domain of the molecule is sufficient to confer oncogenic activation. In contrast, in human breast and ovarian cancers, the receptor is activated through amplification and overexpression of the wild-type gene. This alteration occurs in 25%-30% of cases and is associated with a poor prognosis. The poor prognosis of ovarian and breast cancer patients associated with c-erbB-2 overexpression seemed to be sufficiently explained by a c-erbB-2-mediated high rate of tumor cell proliferation. Amplification of c-erbB-2 proto-oncogene has been reported in endocrine tumors. C-erbB-2 may play a role in the genesis of human gastric, endometrial and salivary gland cancers. The concentration of c-erbB-2 protein in serum can be a sensitive indicator for prognosis of the gastric carcinoma that express cerbB- 2. The c-erbB-2 protein expression might be enhanced in advanced stages during the progression of gastric carcinoma. CerbB- 2 oncoprotein is detectable in adenocarcinomas as well as in transitional cell carcinomas. Topoisomerase II , which correlates with c-erbB-2 expression, contributes to the resistance of c-erbB-2 overexpressing carcinomas.

Also known as erbB2 and CD40, HER-2 is closely related in structure to the epidermal growth factor receptor. It is over-expressed in a variety of carcinomas, especially those of breast and ovary.

Synonyms: HER-2, NEU, p185erbB2, NGL, c-erbB-2, MNL19