Anti-Human HER2/ErbB-2/c-neu monoclonal Antibody (Clone: 4D5 (muMAb)) | PA007157.rt1

Catalog No.: PA007157.rt1 | **Isotype:** Rat IgG1 Kappa | **In Vivo Grade**

Trastuzumab biosimilar (clone huMAb 4D5-8) is the humanized anti-human HER2 mouse monoclonal antibody (clone muMAb 4D5). Recombinant mouse IgG1 isotype controls, other mouse and rat IgG isotype controls are available.

Product Specifications

Catalog No.	PA007157.rt1
Product Name	In vivo Grade Recombinant Anti-Human HER2/ErbB-2/c-neu monoclonal Antibody, Rat IgG1 Kappa
Clone & Isotype	4D5 (muMAb) | Rat IgG1 Kappa
Synonyms	Anti-ErbB-2 Mouse Monoclonal Antibody, Anti-c-neu Mouse Monoclonal Antibody
Applications	ELISA, neutralization, functional assays such as bioanalytical PK and ADA assays, and those assays for studying biological pathways affected by HER2 / ErbB-2 / c-neu.
Reactivity & Immunogen	Human. No cross reactivity to mouse, rat. | Recombinant human HER2 / ErbB-2 / c-neu.
Immunogen / Host	The in vivo grade recombinant anti-human HER2 / ErbB-2 / c-neu mouse monoclonal antibody was produced in mammalian cells.
Purification	The in vivo grade recombinant anti-human HER2 / ErbB-2 / c-neu mouse monoclonal antibody was affinity-purified by protein A.
Purity & Endotoxin	**>95%** by SDS-PAGE under reducing conditions. | **< 1 EU per 1 ug** of the protein by the LAL method.
Formulation	0.2 uM filtered solution, PBS, pH 7.4, no stabilizers or preservatives.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70°C as supplied. 1 month from date of receipt, 2 to 8°C as supplied.

Biological Description & Background

Trastuzumab, a humanized monoclonal antibody (clone HuMAb 4D5-8), interferes with the HER2/neu receptor and is mainly used to treat certain breast cancers, especially HER2-positive metastatic breast cancer. Combined with chemotherapy, trastuzumab increases both survival and response rate.

There are four closely related receptor tyrosine kinases in the ErbB family of receptors: EGFR (ErbB-1; HER1 in humans), HER2/c-neu (ErbB-2), Her 3 (ErbB-3) and Her 4 (ErbB-4). Bound by members of the epidermal growth factor family (EGF-family) of extracellular protein ligands, the HER receptors embedded in the cell membrane promote cell growth and division by turning genes on and off. The HER2 pathway stimulates cell proliferation if it normally functions; when HER2 is overexpressed, cell growth accelerates beyond its normal limits, which happens in some cancers, notably certain types of breast cancer.

Ordering & Technical Support

For custom volume ordering or inquiries, please visit the product webpage or contact our support team:

- **Product Webpage:** https://www.ushelf.com/anti-human-her2-erbb-2-c-neu-rat-igg1-antibody-pa007157-rt1/
- **Order Phone:** 1-617-401-8149 | **Fax:** 1-617-606-5022
- **Support Email:** message@sydlabs.com