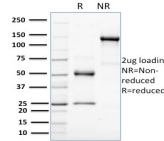


HER-4 / ERBB4 Monoclonal Mouse Antibody (HFR-1)



Product Description

The EGF receptor family comprises several related receptor tyrosine kinases that are frequently overexpressed in a variety of carcinomas. Members of this receptor family include EGFR (HER1), Neu (ErbB-2, HER2), ErbB-3 (HER3) and ErbB-4 (HER4), which form either homodimers or heterodimers upon ligand binding. The gene encoding ErbB-4 is expressed as a full-length protein, which produces a short membrane-anchored cytoplasmic domain fragment and a long ectodomain fragment. The short fragment is heavily tyrosine phosphorylated and possesses tyrosine kinase catalytic activity toward an exogenous substrate. Proteolytic cleavage of ErbB-4 is promoted by the binding of heregulin. ErbB-4 is involved in cell proliferation and differentiation and its expression is highest in breast carcinoma cell lines, normal skeletal muscle, heart, pituitary, brain and cerebellum. Its expression in breast cancer, pediatric brain cancer and other types of carcinomas has been reported in studies which suggest ErbB4 expression is involved in both normal tissue development and carcinogenesis. Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors. **Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Product attributes

Antibody number	#2379
Antibody reactivity (target)	ERBB4, HER-4
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	HFR-1
Isotype	IgG2b, kappa
Molecular weight	180 kDa (precursor); 80/120 kDa (cleaved)
Synonyms	Avian erythroblastic leukemia viral oncogene homolog 4; ERBB4; HER4; human epidermal growth factor receptor 4; p180erbB4; Proto-oncogene-like protein c-ErbB-4
Human gene symbol	ERBB4
Entrez gene ID	2066
SwissProt	Q15303
Unigene	390729
Immunogen	Recombinant human ERBB4 (HER4) protein fragment (around aa 1116-1269) (exact sequence is proprietary)
Verified antibody applications	Flow (verified), IF (verified)
Antibody target cellular localization	Plasma membrane, Nucleus
Species reactivity	Human, Mous
Antibody application notes	Predicted to react with Rat, Chicken; Flow cytometry: 1-2 ug/million cells; Immunofluorescence: 1-2 ug/mL; Optimal dilution for a specific application should be determined.
Positive control	Breast, brain, heart or kidney. MCF-7 cells.
Shipping condition	Room temperature
Storage Conditions	Note: store BSA-free antibodies at -10 to -35 °C, Store at 2 to 8 °C, Protect fluorescent conjugates from light
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Tumor expression	Brain cancer, Breast cancer

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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