Technical Data Sheet

Purified Mouse Anti-Human c-erbB-3

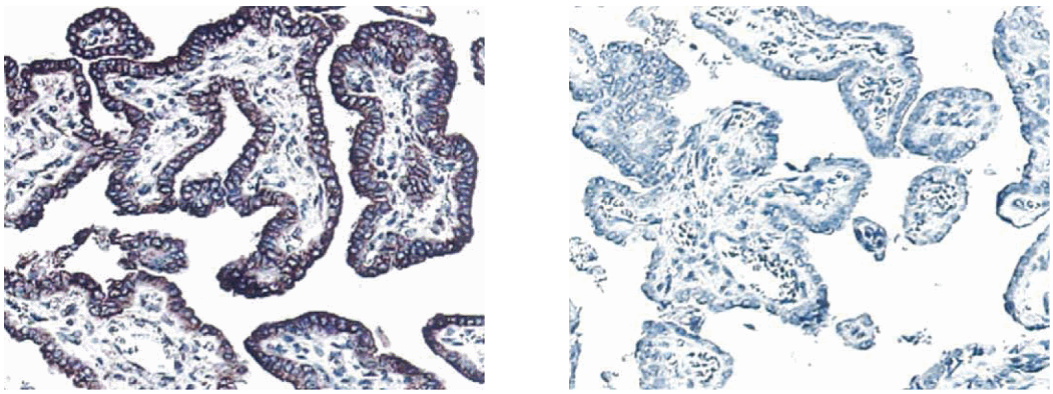
Product Information

Material Number:	**554208**
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	RTJ.1
Immunogen:	Human c-erbB-3 Peptide
Isotype:	Mouse IgM
Reactivity:	QC Testing: Human
Target MW:	160 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

C-erbB-3, a glycoprotein of 160 kD, is a member of the type 1 growth factor receptor subfamily which also includes c-erbB-2 (HER2/neu), c-erbB-4 and the epidermal growth factor receptor (EGFR, c-erbB-1). Members of this receptor subfamily mediate the proliferation and differentiation of normal cells. They have a common structure consisting of an extracellular domain, a transmembrane region, and a cytoplasmic sequence. The extracellular regions contain two cysteine-rich domains, and the intracellular regions have sequence homology to known tyrosine kinases. C-erbB-3 is expressed in tissues from the digestive, urinary and respiratory tracts, the circulatory system, and female and male reproductive organs. c-erb B-3 is undetectable in hematopoietic tissue and cell lines derived from hematopoietic tumors. Cellular localization has been described as cytoplasmic and/or membrane, and nuclear. The level and pattern of c-erbB-3 expression varies widely in both normal and tumor tissues.

Clone RTJ.1 recognizes an epitope in the cytoplasmic domain of the human c-erbB-3 protein. It does not react with the EGF receptor or c-erbB-2. A synthetic peptide (referred to as 49.3) from the cytoplasmic domain of human c-erbB-3 protein was used as immunogen. RTJ.1 identifies a 160 kD band corresponding to c-erbB-3 by western blot analysis and immunoprecipitation. RTJ.1 may also react with two additional, unidentified higher molecular weight bands by immunoprecipitation and western blot analysis. These bands are likely to be non-specific, as they were not detected with a polyclonal antibody raised against the same immunogen. Because two additional bands were observed, the specificity of RTJ.1 for immunohistochemistry was analyzed by comparing staining results to those obtained using three polyclonal antibodies also raised against 49.3. Identical staining results were obtained using RTJ.1 and all three polyclonal antibodies. These results validated the use of RTJ.1 for immunohistochemical analysis of c-erbB-3.



Formalin-fixed, paraffin-embedded tissue section of mouse thyroid stained with (left panel) anti-c-erbB-3, clone RTJ.1 (Cat. No. 554208), or (right panel) a mouse IgM isotype control.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at 4°C.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit **bdbiosciences.com/how_to_order/**

Application Notes

Application

Immunohistochemistry-formalin (antigen retrieval required)	Routinely Tested
Immunohistochemistry-frozen	Reported
Immunoprecipitation	Reported
Western blot	Reported

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

Carraway KL 3rd, Cantley LC. A neu acquaintance for erbB3 and erbB4: a role for receptor heterodimerization in growth signaling. *Cell.* 1994; 78(1):5-8.(Biology)

Hesketh R. *The Oncogene Handbook.* New York: Academic Press; 1994:485-509.(Biology)

Prigent SA, Lemoine NR, Hughes CM, Plowman GD, Selden C, Gullick WJ. Expression of the c-erbB-3 protein in normal human adult and fetal tissues. *Oncogene.* 1992; 7(7):1273-1278.(Biology)

Rajkumar T, Gooden CS, Lemoine NR, Gullick WJ, Goden CS. Expression of the c-erbB-3 protein in gastrointestinal tract tumours determined by monoclonal antibody RTJ1. *J Pathol.* 1993; 170(3):271-278.(Clone-specific: Immunohistochemistry, Immunoprecipitation, Western blot)

Sanidas EE, Filipe MI, Linehan J, et al. Expression of the c-erbB-3 gene product in gastric cancer. *Int J Cancer.* 1993; 54(6):935-940.(Clone-specific: Immunohistochemistry)