

Datasheet for ABIN335374

anti-CD56 antibody





Overview

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Quantity:	0.1 mg
Target:	CD56 (NCAM1)
Reactivity:	Human, Zebrafish (Danio rerio)
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This CD56 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunocytochemistry (ICC)
Product Details	
Immunogen:	123C3 is a mouse monoclonal IgG1 antibody derived by fusion of mouse myeloma cells with spleen cells from a mouse immunized with the a membrane preparation of a small cell lung carcinoma specimen.
Clone:	123C3
Isotype:	lgG1
Specificity:	Human.
Purification:	Purified
Target Details	
Target:	CD56 (NCAM1)
Alternative Name:	NCAM / CD56 (NCAM1 Products)

Target Details

Background:

NCAM, as a member of the immunoglobulin superfamily of adhesion molecules is characterized by several immunoglobulin (Ig)-like domains. The extracellular part of NCAM consists of five of these Ig domains and two fibronectin type III homology regions. NCAM is encoded by a single copy gene composed of 26 exons. However, at least 20-30 distinct isoforms can be generated by alternative splicing and by posttranslational modifications, such as sialylation. During sialylation, polysialic acid (PSA) carbohydrates are attached to the extracellular part of NCAM. Through its extracellular region, NCAM mediates homophilic interactions. In addition, NCAM can also undergo heterophilic interactions by binding extracellular matrix components, such as laminin, or other cell adhesion molecules, such as integrins.

Application Details

Application Notes:

123C3 was defined as a cluster I antibody during the First International Workshop on Small Cell Lung Cancer (SCLC) Antibodies. 123C3 recognizes an epitope in the NCAM exons 11-13 which is dependent on an intact conformation of the first fibronectin type-III homologous domain encoded by these exons. 123C3 stains NCAM which is present in small cell lung cancer and lung carcinoids. It also reacts with a number of non-small cell lung carcinomas and neuroendocrine and neuronal derived tissues. In addition, 123C3 is internalized after binding to its antigen on SCLC cell lines, making it an excellent reagent for tumor imaging in xenograft models. 123C3 is suitable for immunoblotting, immunocytochemistry and immunohistochemistry on frozen and paraffin-embedded tissues. Optimal antibody dilution should be determined by titration, recommended range is 1:100 - 1:200 for immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent, and 1:100 - 1:1000 for immunoblotting applications.

Restrictions:

For Research Use only

Handling

Storage:

4°C

Publications

Product cited in:

Kwa, Verheijen, Litvinov, Dijkman, Mooi, Van Krieken: "Prognostic factors in resected non-small cell lung cancer: an immunohistochemical study of 39 cases." in: **Lung cancer (Amsterdam, Netherlands)**, Vol. 16, Issue 1, pp. 35-45, (1997) (PubMed).

Kwa, Verhoeven, Storm, van Zandwijk, Mooi, Hilkens: "Radioimmunotherapy of small-cell lung cancer xenografts using 131I-labelled anti-NCAM monoclonal antibody 123C3." in: **Cancer immunology, immunotherapy: CII**, Vol. 41, Issue 3, pp. 169-74, (1995) (PubMed).

Gerardy-Schahn, Eckhardt: "Hot spots of antigenicity in the neural cell adhesion molecule NCAM." in: **International journal of cancer. Supplement = Journal international du cancer. Supplement**, Vol. 8, pp. 38-42, (1994) (PubMed).

Kibbelaar, Moolenaar, Michalides, Van Bodegom, Vanderschueren, Wagenaar, Dingemans, Bitter-Suermann, Dalesio, Van Zandwijk: "Neural cell adhesion molecule expression, neuroendocrine differentiation and prognosis in lung carcinoma." in: **European journal of cancer (Oxford, England : 1990)**, Vol. 27, Issue 4, pp. 431-5, (1991) (PubMed).

Moolenaar, Muller, Schol, Figdor, Bock, Bitter-Suermann, Michalides: "Expression of neural cell adhesion molecule-related sialoglycoprotein in small cell lung cancer and neuroblastoma cell lines H69 and CHP-212." in: **Cancer research**, Vol. 50, Issue 4, pp. 1102-6, (1990) (PubMed).

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