

Anti-Tenascin [I-81C6 (Neuradiab)] Standard Size Ab00742-23.0

This chimeric rabbit antibody was made using the variable domain sequences of the original Mouse IgG2b format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Rabbit IgG, Kappa

Clone Number: I-81C6 (Neuradiab)

Alternative Name(s) of Target: Cytotactin; GMEM; GP 150-225; Glioma-associated-extracellular matrix antigen; Hexabrachion; JI; Myotendinous antigen; Neuronectin; Tenascin-C

UniProt Accession Number of Target Protein: P24821

Published Application(s): cross-competition assay, immunoreactivity, radioiodination, ELISA Published Species Reactivity: Human

Immunogen: This therapeutic antibody was generated by radiolabelling, using a modified lodo-gen procedure, murine anti-human tenascin Mab 81C6. Mab 81C6 was raised by immunizing mice with the glial fibrillary acidic protein-positive human glioma cell line U-251 MG (Bourdon et al, 1983).

Specificity: This antibody is specific for tenascin, which is expressed in restricted locations in normal adult liver, kidney, spleen, and papillary dermis. However, tenascin has been shown to have increased stromal expression in breast carcinomas, gliomas, and prostatic carcinomas. Consequently, this antibody reacts with most human glioma cell lines, xenografts, and biopsy tissue, but not with normal brain tissue.

Application Notes: This I-labelled murine antibody binds tenascin, which is over expressed in certain cancers, and as a result has been used to deliver a radiation boost to the surgically created resection cavity (SCRC) margin; administration of a patient-specific radioactivity dose of this antibody into the SCRC enabled the consistent achievement of a 44-Gy boost to the SRC 2cm margin, associated with reduced neurotoxicity and improved survival relative to fixed dosing approaches (Reardon, 2008). In addition, a humanized form of this I-labeled murine antibody, generated by joining the 81C6 variable regions to the constant region of human IgG2, has been characterised through binding assays, cross-competition assays and immunoreactivity analysis, and has exhibited superior uptake in human glioma xenografts compared with its murine 81C6 parent (Zalutsky, 1996).

Antibody First Published in: Bourdon et al, Reardon et al Human Glioma-Mesenchymal Extracellular Matrix Antigen Defined by Monoclonal Antibody & A pilot study: 131I-Antitenascin monoclonal antibody 81c6 to deliver a 44-Gy resection cavity boost CANCER RESEARCH 43. 2796-2805, June 1983 (Bourdon et al) and Neuro Oncol. 2008 Apr; 10(2): 182–189 (Reardon et al).

PMID:

Note on publication: Bourdon et al describes the original generation of the mouse anti-human tenascin antibody, 81C6. Reardon et al describes the subsequent radiolabelling of this antibody.

Product Form

Size: 200 µg Purified antibody.

Purification: Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at - 20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.