Anti-disialoganglioside 2 [7A4] Bulk Size Ab00770-10.3-BT

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

**Isotype and Format:** Human IgG1, Fc Silent™, Kappa

**Clone Number:** 7A4

**Alternative Name(s) of Target:** GD2

**UniProt Accession Number of Target Protein:**

**Published Application(s):** Depletion, RIA, TLC, ELISA, IF, IHC

**Published Species Reactivity:** Human

**Immunogen:** 7A4 was generated by hyperimmunizing mice with recombinant gamma-interferon-treated LAN-1 neuroblastoma cells.

**Specificity:** 7A4 binds to GD2: GD2+ neuroblastoma cell lines and melanomas, small-cell lung carcinomas, rhabdomyosarcomas, Ewings sarcomas, Wilm's tumors and retinoblastomas also expressing GD2. GD2- cell lines or GD2- peripheral blood cells are not bound by the antibody. The antibody and the scFv cross-react weakly with GD3 and GM2. GD2 is a target for tumor therapy due to its high level of expression in the majority of neuroblastoma and melanoma cells, and poor levels of expression in normal tissues.

**Application Notes:** 7A4 is able to lyse tumour cells by complement-mediated cytotoxicity (lytic dose ~10 ng) and can perform in vitro direct binding of labelled mAb to living and glutaraldehyde-fixed cells. Shows strong binding to all neuroblastomas tested in addition to other GD2-expressing cells such as melanomas, small-cell lung carcinomas, rhabdomyosarcomas, Ewings sarcomas, Wilm's tumors and retinoblastomas. TLC analysis can be used to confirm the antibody target antigen. The 7A4 scFv possesses the same specificity as the full-length antibody but slightly weaker binding affinity. The scFv has been used in IF studies (PMID: 9309424).

**Antibody First Published in:** Gross et al. New anti-GD2 monoclonal antibodies produced from gamma-interferon-treated neuroblastoma cells International journal of cancer, 15 April 1989, Vol.43(4), pp.665-71 PMID:2467885

**Note on publication:** Describes the characterization of 7A4 and other anti-neuroblastoma antibodies by TLC, IHC, in vitro direct binding, complement-cytotoxicity assays and solid phase RIA.

**Product Form**

**Size:** 1 mg Purified antibody in bulk size.

**Purification:**
Protein A affinity purified

**Supplied In:** PBS only.

**Storage Recommendation:** Store at 4⁰C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommed this antibody be handled under sterile conditions. For longer storage, aliquot and store at -20⁰C.

**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.