

Anti-4Ig-B7H3 [8H9] Bulk Size Ab03824-1.1-BT

Isotype and Format: Mouse IgG1, Kappa

Clone Number: 8H9

Alternative Name(s) of Target: 4Ig domain isoform of the human B7-homolog 3; CD276; B7-H3; B7H3; CD276 antigen; B7 homolog 3; 4Ig-B7-H3; costimulatory molecule

UniProt Accession Number of Target Protein: Q5ZPR3

Published Application(s): in vivo, IP, therapeutic, WB, IHC

Published Species Reactivity: Human

Immunogen: The antibody was originally generated by immunizing BALB/c mice with human neuroblastoma.

Specificity: The antibody recognizes the 4Ig Domain Isoform of the Human B7-Homolog 3, 4Ig-B7H3. The epitope that the antibody recognizes appears to be restricted to tumors versus normal tissues.

Application Notes: The antibody was highly reactive with human brain tumors, childhood sarcomas, and neuroblastomas by immunohistochemistry. The antibody was nonreactive with normal human tissues. 4Ig-B7H3 was immunoprecipitated using this antibody (Modak et al., 2001; PMID: 11358824). In vitro characterization of radiolabeled 8H9 showed that (125)I-8H9 had a K(d) of 10.3nM with an estimated 115,000 binding sites on every HTB82 cell. Further, (125)I-8H9 was retained on the cell surface without significant internalization. In vivo targeting of 125I and 131I-labeled 8H9 in human RMS xenografts was studied. 125I-8H9 could be used for tumor localization in animals. Instead, mice injected with 131I-8H9 showed a significant suppression in tumor volume (Modak et al., 2005; PMID: 16248769). Further, 131-Iodine-8H9 administered through the Ommaya had favorable pharmacokinetics in non-human primates with minimal toxicities. 31-Iodine-8H9 was used in a phase I study with brain tumors, the antibody was safe and might have clinical utility when added to salvage therapy using conventional modalities in the treatment of 8H9-positive LM/CNS cancers. The antibody detected 4Ig-B7H3 under native conditions in LAN-1, HTB82 and U2OS but not in Daudi cells by western blot analysis. The antibody was unable to recognise the antigen under reducing conditions in Western blot analysis (US20100143245A1).

Antibody First Published in: Modak et al. Monoclonal antibody 8H9 targets a novel cell surface antigen expressed by a wide spectrum of human solid tumors Cancer Res. 2001 May 15;61(10):4048-54. [PMID:](#)

Note on publication: The original paper describes the generation and characterization of the antibody

Product Form

Size:

1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. 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.