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Iodine I 131 Omburtamab

National Cancer Institute

Source

National Cancer Institute. *Iodine I 131 Omburtamab*. NCI Thesaurus. Code C48400.

A radioimmunoconjugate consisting of the iodine 131-radiolabeled murine IgG1 monoclonal antibody 8H9 directed against the surface immunomodulatory glycoprotein 4Ig-B7-H3 with potential radioimaging and radioimmunotherapeutic uses. Iodine I 131 monoclonal antibody 8H9 binds to 4Ig-B7-H3 (human B7-H3 with 4 Ig-like domains) and may be used to radioimage and/or destroy tumor cells that express tenascin. 4Ig-B7-H3 inhibits T-cell activation and the production of effector cytokines such as interferon-gamma and interleukin-4; it is expressed on the cell membranes of a wide variety of tumors of neuroectodermal, mesenchymal and epithelial origin and is highly expressed on monocyte-derived dendritic cells (mdDCs). In vitro, it has been shown that monoclonal antibody-mediated masking of 4Ig-B7-H3 on neuroblastoma cells resulted in the enhancement of natural killer (NK)-mediated lysis of target cells.