



Mouse Anti-Human Ganglioside GD2 Monoclonal antibody, clone 14G2a (CABT-L4543)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

The 14G2a monoclonal antibody reacts with human ganglioside GD2 a sialic-acid bearing glycolipid that is involved in mediating cell attachment to the extracellular matrix. Ganglioside GD2 is expressed on tumors of neuroectodermal origin including human neuroblastoma and melanoma. The tumor specific expression of GD2 makes it a suitable target for immunotherapy with monoclonal antibodies or with artificial T cell receptors. Clone 14G2a is an isotype switch variant selected from the parental IgG3-producing hybridoma 14.18 and has identical reactivity as the parental antibody.

Target	Human Ganglioside GD2
Immunogen	Neuroblastoma cell line LAN-1
Isotype	IgG2a, κ
Source/Host	Mouse
Species Reactivity	Human
Clone	14G2a
Purification	Protein A purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vitro induction of apoptosis in GD2+ cells, in vivo inhibition of GD2+ tumor cell growth
Molecular Weight	150 kDa

Format	0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction Gangliosides are a group of galactose-containing cerebrosides found in the surface membranes of nerve cells. Ganglioside GD2 is a disialoganglioside expressed on tumors of neuroectodermal origin, including human neuroblastoma and melanoma, with highly restricted expression on normal tissues, principally to the cerebellum and peripheral nerves in humans. GD2 is a suitable target for immunotherapy with monoclonal antibodies or with artificial T cell receptors due to its relatively tumor specific expression.

Keywords Disialoganglioside GD2;

GENE INFORMATION

Official Symbol	Ganglioside GD2
Synonyms	Disialoganglioside GD2;
References	Durbas, M., et al. (2018). "GD2 ganglioside-binding antibody 14G2a and specific aurora A kinase inhibitor MK-5108 induce autophagy in IMR-32 neuroblastoma cells." <i>Apoptosis</i> 23(9-10): 492-511. PubMed;