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AM10173SU-N Monoclonal Antibody to Ganglioside GD3 - Supernatant

Quantity: 1 ml

Background: Almost all melanomas, astrocytomas, a proportion of sarcomas, a small number of carcinomas, some nevi, as well as normal melanocytes express GD3 antigen. It is one of the most important markers for malignant melanoma. Antibodies to the GD3 ganglioside can induce partial remission of tumor growth in animals as well as in Humans via enhancement of cytotoxic and proliferative response of lymphocytes.

Host / Isotype: Mouse / IgG3

Clone: 4F6

Immunogen: Ganglioside-GD3

Format: **State:** Lyophilized Cell Culture Supernatant
Preservatives: None
Reconstitution: Restore in distilled water.

Applications: **ELISA:** 1/5-1/50.
Thin-layer chromatography (TLC): 1/5-1/20.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: Reacts with GD3 Ganglioside: (NeuAc alpha 2-8NeuAc alpha 2-3Gal beta 1-4Glc beta 1-1Cer).
Cross reacts with 9-O-AcGD3 ganglioside (9OAcNeuAc alpha 2-8NeuAc alpha 2-3Gal beta 1-4Glc beta 1-1Cer) and GT1a ganglioside (NeuAc alpha 2-8NeuAc alpha 2-3Gal beta 1-4GalNAc beta 1-4 (NeuAc alpha 2-3) Gal beta 1-4Glc beta 1-1Cer).

Storage: Store prior to reconstitution at -20°C.
Following reconstitution store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. Natunen S. et al. Novel acidic glycan markers of human cells. Patent Application publication. 2011 feb 24.
2. Kang NY, Kang Y, Kang SK, Lee YC, Choi HJ, Lee YS, et al. Transcriptional regulation of the human GD3 synthase gene expression in Fas-induced Jurkat T cells: a critical role of transcription factor NF-kappaB in regulated expression. Glycobiology. 2006 May;16(5):375-89. Epub 2006 Feb 15. PubMed PMID: 16481330.
3. Cerato E, Birkle S, Portoukalian J, Mezazigh A, Chatal JF, Aubry J. Variable region gene segments of nine monoclonal antibodies specific to disialogangliosides (GD2, GD3) and their O-acetylated derivatives. Hybridoma. 1997 Aug;16(4):307-16. PubMed PMID: 9309421.
4. Thomas CP, Buronfosse A, Combaret V, Pedron S, Fertil B, Portoukalian J. Gangliosides protect human melanoma cells from ionizing radiation-induced clonogenic cell death. Glycoconj J. 1996 Jun;13(3):377-84. PubMed PMID: 8781968.
5. Zebda N, Pedron S, Rebbaa A, Portoukalian J, Berthier-Vergnes O. Deficiency of

ganglioside biosynthesis in metastatic human melanoma cells: relevance of CMP-NeuAc:LacCer alpha 2-3 sialyltransferase (GM3 synthase). FEBS Lett. 1995 Apr 3;362(2):161-4. PubMed PMID: 7720864.
6. Portoukalian J, David MJ, Gain P, Richard M. Shedding of GD2 ganglioside in patients with retinoblastoma. Int J Cancer. 1993 Apr 1;53(6):948-51. PubMed PMID: 8473052.