## **Product Datasheet**

# GM2 Ganglioside Antibody (L55-81) - Chimeric - Azide and BSA Free NBP2-81278-0.2mg

Unit Size: 0.2 mg

Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.

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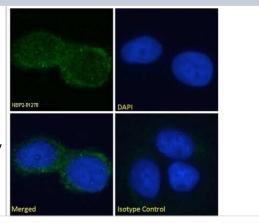
## NBP2-81278-0.2mg

GM2 Ganglioside Antibody (L55-81) - Chimeric - Azide and BSA Free	
Product Information	
Unit Size	0.2 mg
Concentration	1 mg/ml
Storage	Store at 4C for up to 3 months. For longer storage, aliquot and store at -20C.
Clonality	Monoclonal
Clone	L55-81
Preservative	0.02% Proclin 300
Isotype	IgG Kappa
Purity	Protein A purified
Buffer	PBS
Product Description	
Host	Rabbit
Species	Human
Specificity/Sensitivity	L55-81 binds specifically to GM2 ganglioside; this antibody shows no reactivity towards GM1, GM3, GD2 or normal tissues- the L55-81 epitope contains both a GalNAc and sialic acid bound to lactose. Ganglioside GM2 (GalNAcbeta1-4 (NeuNAcalpha2-3)Galbeta1-4Glcbeta-1ceramide) is a glycosphingolipid present on the cell surface and a major tumor-differentiation antigen in human melanoma and hepatoma.
Immunogen	L55-81 was prepared by isolating EBV-immortalized peripheral blood B lymphocytes from a human donor with melanoma.
Product Application Details	
Applications	ELISA, Functional, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Cell depletion
Recommended Dilutions	ELISA, Immunohistochemistry, Immunocytochemistry/Immunofluorescence, Functional, Cell depletion
Application Notes	This chimeric rabbit antibody was made using the variable domain sequences of the original Human IgM format, for improved compatibility with existing reagents, assays and techniques. L55-81 reacts positively to melanoma cell lines with high GM2 expression (M14; M24), and shows no binding to normal cell types or cell lines M15 or M25 which have low GM2 expression and high GM3 expression. This specificity can be confirmed by ELISA and TLC immunostaining by testing a variety of gangliosides and neutral glycolipids. L55-81 is able to lyse cells from the M14 melanoma cell line (which has high GM2 expression) in the presence of human or rabbit complement, but not in the absence of complement - this was shown by a [51Cr] release assay. Biotinylated L55-81 has been used for IHC of acetone-fixed sections of tumor tissue in an avidin-biotin complex immunoperoxidase system. Statistically significant positive staining (determined by Fisher's exact test) was displayed with melanoma, colon carcinoma and ovary carcinoma tumor tissues. Staining has also be observed with breast carcinoma, prostate carcinoma and kidney carcinoma.



#### **Images**

Immunocytochemistry/Immunofluorescence: GM2 Ganglioside Antibody (L55-81) - Chimeric [NBP2-81278] - Immunofluorescence analysis of paraformaldehyde fixed MCF7 cells on Shi-fix coverslips, permeabilized with 0.15% Triton and stained with the chimeric rabbit IgG version of [NBP2-81278] at 10 ug/ml for 1h followed by Alexa Fluor 488 secondary antibody (1 ug/ml), showing diffuse membrane and cytoplasmic staining. The nuclear stain is DAPI (blue). Panels show from left-right, top-bottom NBP2-81278, DAPI, merged channels and an isotype control. The isotype control was stained with an anti-Fluorescein antibody followed by Alexa Fluor 488 secondary antibody.





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### Products Related to NBP2-81278-0.2mg

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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