MONOCLONAL ANTIBODIES IN IMMUNODIAGNOSIS AND IMMUNOTHERAPY Volume 32, Number 6, 2013

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Monoclonal Antibodies

Monoclonal Antibody MsMab-1 Against Mutated IDH1 and IDH2

Antigen Used for Immunization

Synthetic peptides of CGGVKPIIIGGHAYGDQYRA.

Method of Immunization

BDF1 mice were immunized by injecting $80\,\mu g$ of synthetic peptides of CGGVKPIIIGGHAYGDQYRA conjugated with KLH together with Freund's complete adjuvant into footpad.

Parental Cell Line Used for Fusion

Mouse myeloma Sp2/0.

Selection and Cloning Procedure

The culture supernatants were screened using ELISA for binding to IDH1-R132G and IDH1 wild-type peptides conjugated with BSA.

Heavy and Light Chains of Immunoglobulin

IgG_{2a}, kappa.

Specificity

Western blot analysis showed that MsMab-1 reacted with the IDH1-R132G, IDH1-R132S, IDH1-R132H, IDH2-R172S, IDH2-R172G, and IDH2-R172M recombinant proteins, but not with IDH1/2-WTs.

Specific Antigen Identified

IDH1-R132G.

Availability

Tissue culture supernatant	Yes √	No
Ascitic fluid	Yes √	No
Hybridoma cells	Yes	No √

Reference

Ogasawara S, Kaneko MK, Tsujimoto Y, Liu X, and Kato Y: A multi-specific monoclonal antibody MsMab-2 recognizes IDH1-R132L and IDH2-R172M mutations. Monoclon Antib Immunodiagn Immunother 2013;32(6) ■ ■ -■ ■ ■.

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