

MONOCLONAL ANTIBODY

For research use only, Not for diagnostic use.

Catalog No. KAST-MA002, KAST-MA004 Anti PB2 [Clone# 8-1.1]

Background:

There was a need for a novel monoclonal antibody against RNA-dependent RNA polymerase of influenza virus that does not neutralize influenza virus when binding its antigen.

Anti PB2 (clone# 8-1.1) is a monoclonal antibody that binds to the type A influenza virus PB2 subunit of RNA-dependent RNA polymerase by antigen-antibody reaction but does not neutralize it. Anti PB2 (clone# 8-1.1) is not only useful to confirm the expression of the RNA-dependent RNA polymerase but also useful tool for molecular biology study of influenza virus those are harmful to human (e.g. H1N1, H3N2, etc.), and for developing anti-influenza virus agents, since it does not interfere with the growth of influenza virus. Anti PB2 (clone# 8-1.1) also binds with PB2 subunit of avian influenza virus.

Applications: Western Blotting (1:1,000), Immunoprecipitation and Ultracentrifugation analysis

Specificity: RNA polymerase PB2 subunit of type A influenza virus

Immunogen: recombinant RNA polymerase PB2 subunit of H1N1 (a.a. 530-759)

Host: Mouse

Reactivity: Binds with RNA polymerase PB2 subunit of type A influenza virus of human and avian

Clonality: Monoclonal (clone# 8-1.1)

Subclass: IgG1

Purification method: Purified from cell culture medium by affinity column (Protein G)

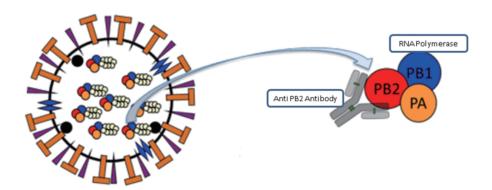
Form: Liquid (PBS), no preservatives added

Volume: 50 ug (KAST-MA004), 100 ug (KAST-MA002)

Concentration: 1 mg/mL Storage condition: -20°C

References:

1: Monoclonal Antibodies Against PB2 Subunit Of RNA-Dependent RNA Polymerase Of Influenza Virus (JP 2015-189715 A 2015.11.2).



Depiction of Anti PB2 (clone# 8-1.1) and RNA Polymerase interaction.

^{*} Anti PB2 (8-1.1) was generated & licensed under research collaboration of Kanagawa Academy Of Science And Technology, Shimane Univ. and Yokohama City Univ.

Example Assay Data:

1. Western Blotting

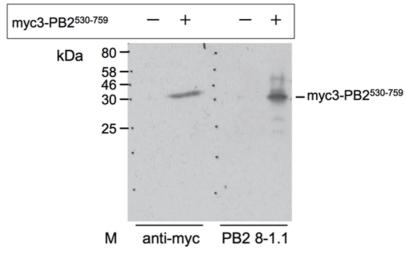


Figure 1. Western Blotting result

Loaded 10 ug/lane

Primary Antibody (anti c-Myc (clone# 9e10), anti PB2 (clone# 8-1.1)), 1:1,000 dilution (1 ug/mL) Secondary Antibody (Anti IgG (H&L), Mouse (Goat)-HRP, Rockland Immunochemicals, Cat.No. 710-1332), 1:2,000 dilution

2. Ultracentrifugation Analaysis

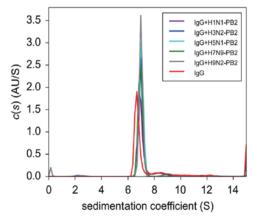


Figure 2. Ultracentrifugation analysis of IgG, PB2(H1N1, H3N2, H5N1, H7N9, H9N2)+IgG

x axis represents sedimentation coefficient, y axis represents sedimentation distribution function. In general, larger the molecule, higher the sedimentation coefficient. As seen from Figure 2, PB2 (H1N1, H3N2, H5N1, H7N9, H9N2) and IgG binds to form larger molecule, indicating anti PB2 antibody (clone# 8-1.1) binds well with PB2.

