Active Myxovirus Resistance 1 (MX1) Instruction Manual

SBPL388Hu01

Homo sapiens (Human)

Buffer Formulation20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.

Traits Freeze-dried powder

Purity > 95% Isoelectric Point 5.8

Applications Cell culture; Activity Assays.

ACTIVITY TEST

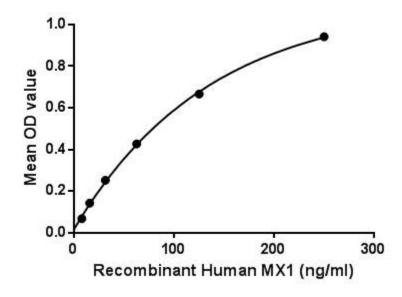


Figure. The binding activity of MX1 with TUBb.

Interferon-induced GTP-binding protein Mx1 is a protein that in humans is encoded by the MX1 gene. In mouse, the interferon-inducible Mx protein is responsible for a specific antiviral state against influenza virus infection. The protein encoded by this gene is similar to the mouse protein as determined by its antigenic relatedness, induction conditions, physicochemical properties, and amino acid analysis. This cytoplasmic protein is a member of both the dynamin family and the family of large GTPases. Besides, Tubulin Beta (TUBb) has been identified as an interactor of MX1, thus a binding ELISA assay was conducted to detect the interaction of recombinant human MX1 and recombinant human TUBb. Briefly, MX1 was diluted serially in PBS with

0.01% BSA (pH 7.4). Duplicate samples of $100\mu L$ were then transferred to TUBb-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-MX1 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add $50\mu L$ stop solution to the wells and read at 450nm immediately. The binding activity of MX1 and TUBb was shown in Figure 1, and this effect was in a dose dependent manner.

USAGE

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

STORAGE

Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

STABILITY

The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37°C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.

Image

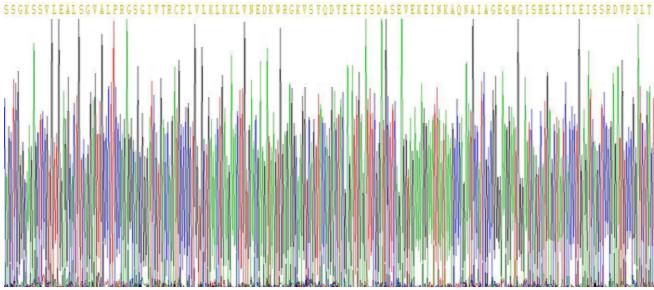


Figure. Gene Sequencing (Extract)

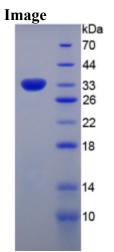


Figure. SDS-PAGE

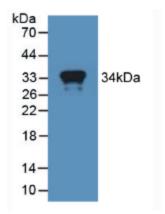


Figure. Western Blot

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.