

Active Tubulin Beta (TUBb) Instruction Manual

SBPB275Hu01

Homo sapiens (Human)

Buffer Formulation

20mM 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

6.6

Applications

Cell culture; Activity Assays.

ACTIVITY TEST

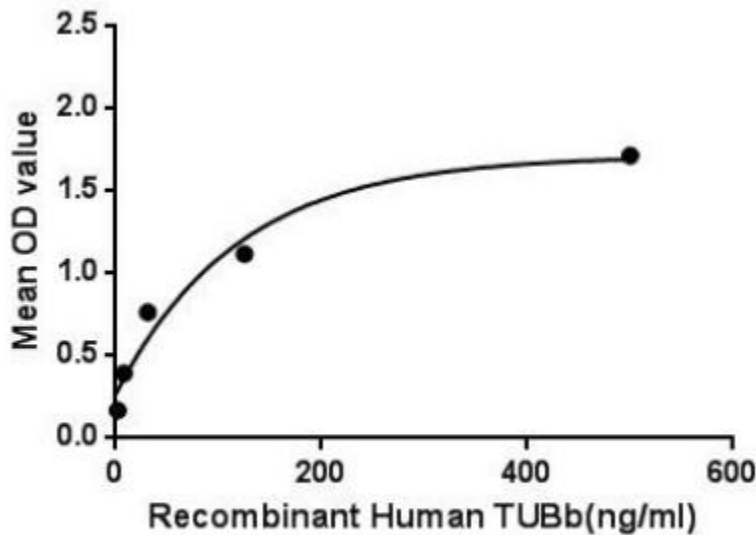


Figure 1. The binding activity of TUBb with MX1.

Tubulin Beta (TUBb) in molecular biology can refer either to the tubulin protein superfamily of globular proteins, or one of the member proteins of that superfamily. It participate in many essential cellular processes, including mitosis. α - and β -tubulins polymerize into microtubules, a major component of the eukaryotic cytoskeleton. Both α and β tubulins have a mass of around 50kDa and are thus in a similar range compared to actin with ~42kDa. TUBb is one of six members of the tubulin superfamily, which binding drugs to kill cancerous cells by inhibiting microtubule dynamics. Besides, Myxovirus Resistance 1 (MX1) has been identified as an interactor of TUBb, thus a binding ELISA assay was conducted to detect the interaction of recombinant human

TUBb and recombinant human MX1. Briefly, TUBb were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to MX1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-TUBb 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 50μL stop solution to the wells and read at 450nm immediately. The binding activity of TUBb and MX1 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

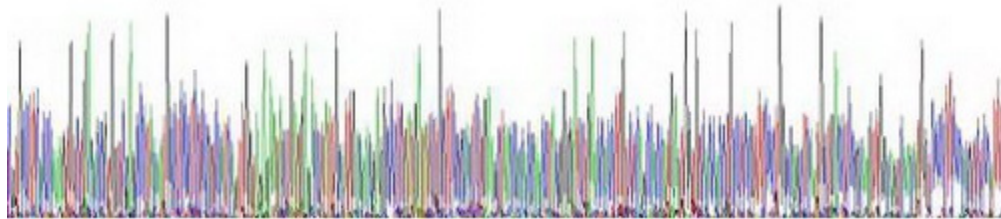
Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

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

MFSPHLSSTVVEPTKASLSVPSLQVHTDRTTCIDKRALTDICPRTIQLTPTTTCILMRCYSATBSGCTTCILRFPGCLKADLRSLAYRHKFFPLDF



SDS-PAGE Image

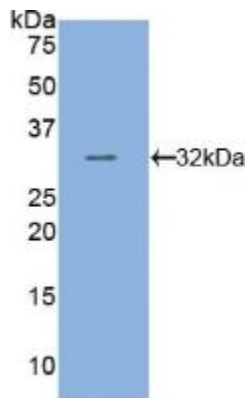


Figure. Western Blot; Sample: Recombinant TUBb, Human.

[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.