# **Active Neuraminidase (NEU) Instruction Manual**

# SBPB251Hu02

## 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 > 97% Isoelectric Point 5.3

**Applications** Cell culture; Activity Assays.

### **ACTIVITY TEST**

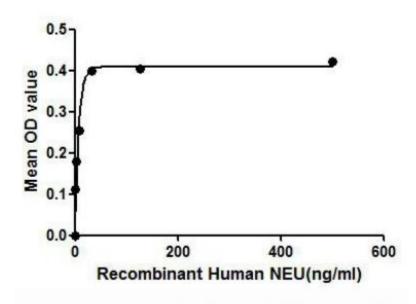


Figure 1. The binding activity of NEU with CTSA.

NEU (Sialidase-1) is an enzyme that catalyzes the removal of sialic acid (N-acetylneuraminic acid) moities from glycoproteins and glycolipids. In the lysosome, this enzyme is part of a heterotrimeric complex together with beta-galactosidase and cathepsin A (CTSA). Thus a binding ELISA assay was conducted to detect the interaction of recombinant human NEU and recombinant human CTSA. Briefly, NEU were diluted serially in PBS, with 0.01%BSA (pH 7.4). Duplicate samples of 100uL were then transferred to CTSA-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-NEU 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 NEU and CTSA was shown in Figure 1, and this effect was in a dose dependent manner.

## **USAGE**

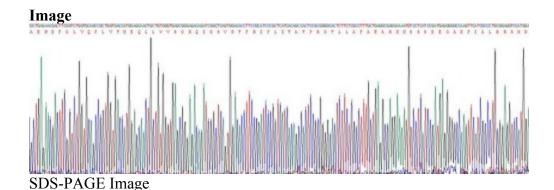
Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

### **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.



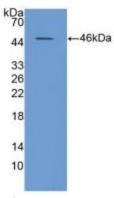


Figure. Western Blot; Sample: Recombinant NEU, Human.

# [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.