# Active Chondroitin Sulfate Proteoglycan 4 (CSPG4) Instruction Manual

# SBPB084Hu02

## 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 6.4

**Applications** Cell culture; Activity Assays.

### **ACTIVITY TEST**

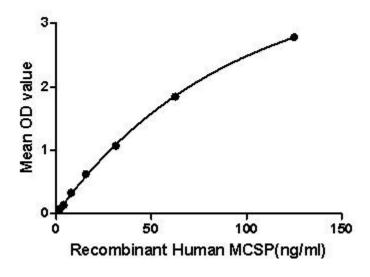


Figure. The binding activity of MCSP with GAL8.

Melanoma-associated chondroitin sulfate proteoglycan (MCSP) is a chondroitin sulfate proteoglycan in humans. CSPG4 plays a role in stabilizing cell-substratum interactions during early events of melanoma cell spreading on endothelial basement membranes. It represents an integral membrane chondroitin sulfate proteoglycan expressed by human malignant melanoma cells. Besides, Galectin-8 (GAL8) has been identified as an interactor of MCSP, thus a binding ELISA assay was conducted to detect the interaction of recombinant human MCSP and recombinant human GAL8. Briefly, MCSP were

diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to GAL8-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-MCSP 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 MCSP and GAL8 was shown in Figure 1, and this effect was in a dose dependent manner.

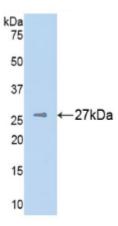


Figure. Western Blot

### **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**

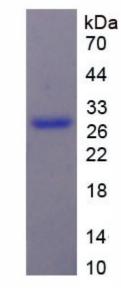


Figure. SDS-PAGE

# [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.