

APB134Hu02 100µg

Active Melanoma Associated Chondroitin Sulfate Proteoglycan (MCSP)

Organism Species: *Homo sapiens* (Human)

Instruction manual

FOR RESEARCH USE ONLY

NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Ser1705~Ile1942

Tags: N-terminal His-tag

Purity: >98%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 6.4

Predicted Molecular Mass: 26.3kDa

Accurate Molecular Mass: 29kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

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

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C for 12 months.

Stability Test: 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.

[SEQUENCE]

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SHLWKN KGLWVPEGQR ARITVAALDA SNLLASVPSP QRSEHDVLFQ
VTQFPSRGQL LVSEEPLHAG QPHFLQSQLA AGQLVYAHGG GGTQQDGFHF
RAHLQGPAGA SVAGPQTSEA FAITVRDVNE RPPQPQASVP LRLTRGSRAP
ISRAQLSVVD PDSAPGEIEY EVQRAPHNGF LSLVGGGLGP VTRFTQADVD
SGRLAFVANG SSVAGIFQLS MSDGASPLP MSLAVDILPS AI
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[ACTIVITY]

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 50µL 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.

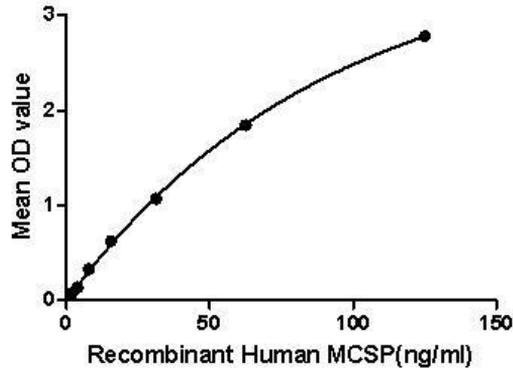


Figure 1. The binding activity of MCSP with GAL8.

[IDENTIFICATION]

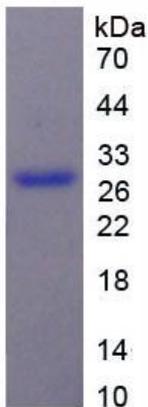


Figure 2. SDS-PAGE

Sample: Active recombinant MCSP, Human

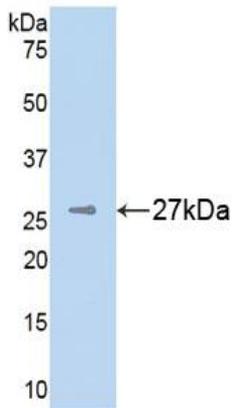


Figure 3. Western Blot

Sample: Recombinant MCSP, Human;

Antibody: Rabbit Anti-Human MCSP Ab (PAB134Hu02)

[IMPORTANT NOTE]

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