

Active Matrix Metalloproteinase 9 (MMP9) Instruction Manual

SBPA145Mu61

Mus musculus (Mouse)

Buffer Formulation	PBS, pH7.4, containing 5% Trehalose.
Traits	Freeze-dried powder
Purity	> 90%
Isoelectric Point	5.7
Applications	Cell culture; Activity Assays.

ACTIVITY TEST

Marker 100 50 25 12.5 6.25 3.1 1.5 0.7ng positive

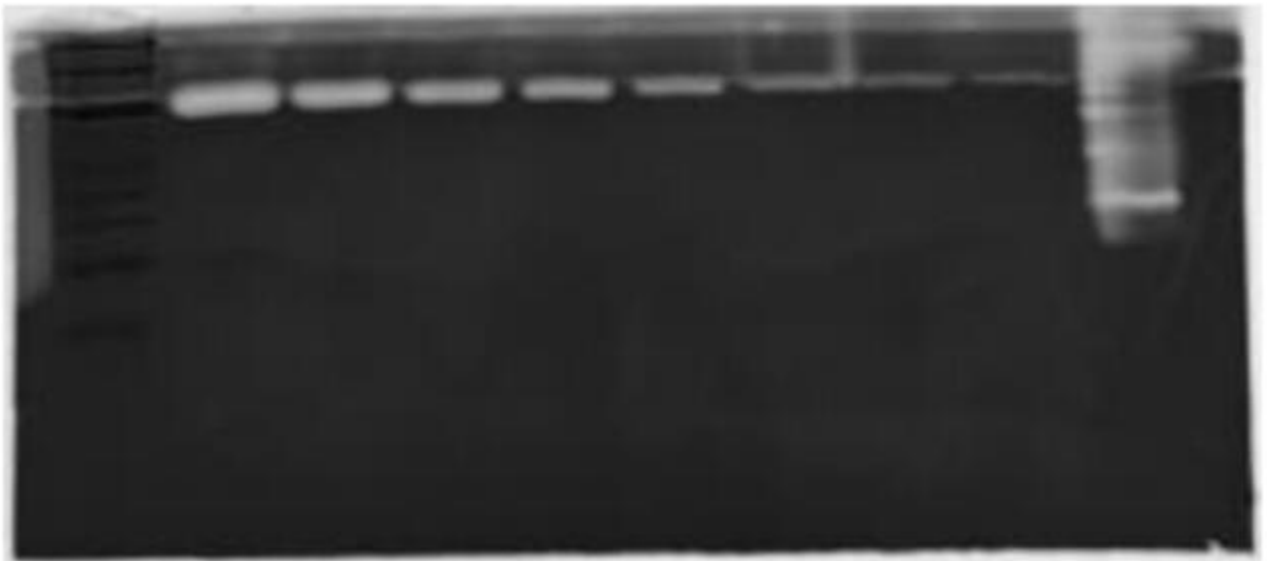


Figure 1

Mechanism: MMP9 is a zinc-dependent enzymes capable of cleaving components of the extracellular matrix, which belongs to the matrix metalloproteinase (MMP) family . It is a gelatinase A, 92 kDa type IV collagenase which can hydrolyze gelatin under certain conditions. Gelatin zymography is mainly used for the detection of the gelatinases, MMP-2 and MMP-9 and It is extremely sensitive because levels of 10 pg of MMP-2 can

already be detected .Briefly, various concentrations of recombinant mouse MMP9 (100ng, 50ng, 25ng, 12.5ng, 6.25ng, 3.1ng, 1.5ng and 0.7ng) were denatured by SDS loading buffer, electrophoresed through sodium dodecylsulphate–polyacrylamide gel (SDS–PAGE; 15% gels) containing gelatin (1 mg/ml) with nonreducing conditions. After renaturation, incubation and CCB-stained, active MMP9 would hydrolyze gelatin nearby, which was indicated by the white binds on the gel. In this experiment we use trypsin as positive control.

Result: Gelatin hydrolysis by recombinant mouse MMP9(10-70kd) was shown in figure 1.

USAGE

Reconstitute in 10mM PBS (pH7.4) 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

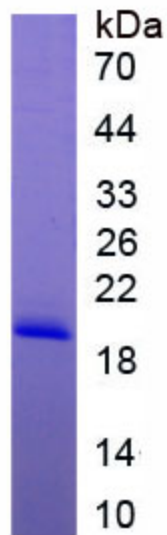


Figure. SDS-PAGE

[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.