

Active Annexin V (ANXA5) Instruction Manual

SBPA108Ra01

Rattus norvegicus (Rat)

Buffer Formulation	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Traits	Freeze-dried powder
Purity	> 95%
Isoelectric Point	5.2
Applications	Cell culture; Activity Assays.

ACTIVITY TEST

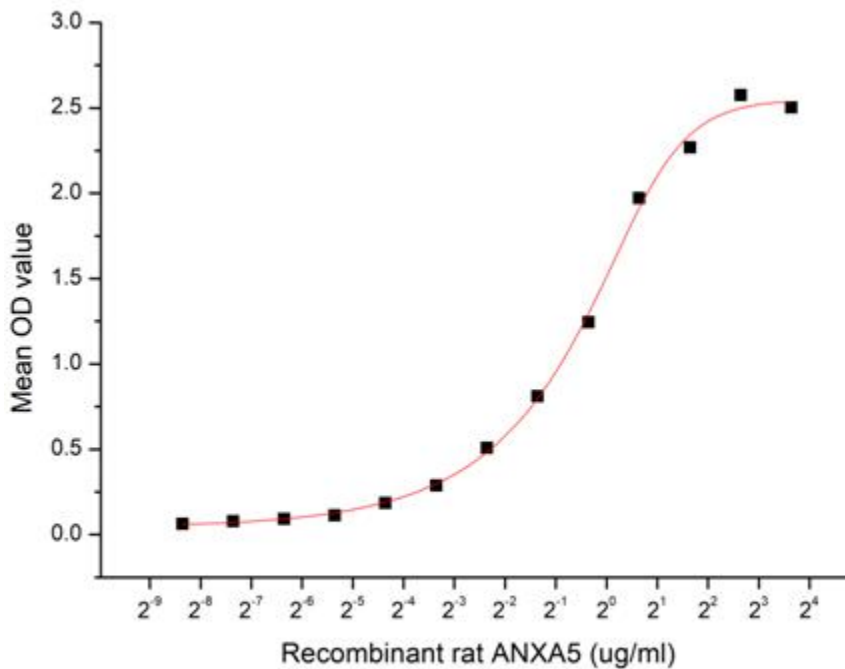


Figure 1. The binding activity of ANXA5 with ACTG

Annexin V (ANXA5) is a multifunctional protein that is highly expressed on the apical surfaces of syncytiotrophoblasts, and plays an important role in haemostatic regulations, maintaining blood fluidity of the placenta. Lower ANXA5 levels have been observed in M2/ANXA5 haplotype carrying chorion. The association found between the maternal carriage of the M2/ANXA5 haplotype and an elevated risk of IUGR and/or PE supports the hypothesis that carrier status of this haplotype and the consequently reduced placental ANXA5 expression might be responsible, at least partially, for the onset of these

gestational vascular complications. ANXA5 could be used as a biomarker for the early detection of PE and for the prediction of its severity. ANXA5 as an embryonic anticoagulant that appears deficient in contiguous specter of thrombophilia-related pregnancy complications culminating more frequently in miscarriage in a maternal M2 carrier background. Besides, Gamma Actin (ACTG) has been identified as an interactor of ANXA5, thus a binding ELISA assay was conducted to detect the interaction of recombinant rat ANXA5 and recombinant human ACTG. Briefly, ANXA5 were diluted serially in PBS, with 0.01% BSA (pH7.4). Duplicate samples of 100 μ l were then transferred to ACTG-coated microtiter wells and incubated for 1h at 37°C. Wells were washed with PBST and incubated for 1h with anti-ANXA5 pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50 μ L stop solution to the wells and read at 450 nm immediately. The binding activity of ANXA5 and ACTG was shown in Figure 1, and this effect was in a dose dependent manner, the EC50 was 0.78 ug/ml.

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

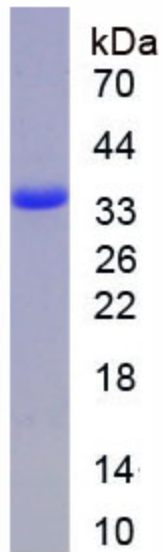


Figure. SDS-PAGE

[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.