

Active Angiopoietin 2 (ANGPT2) Instruction Manual

SBPA005Hu01

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	> 95%
Isoelectric Point	5.4
Applications	Cell culture; Activity Assays.

ACTIVITY TEST

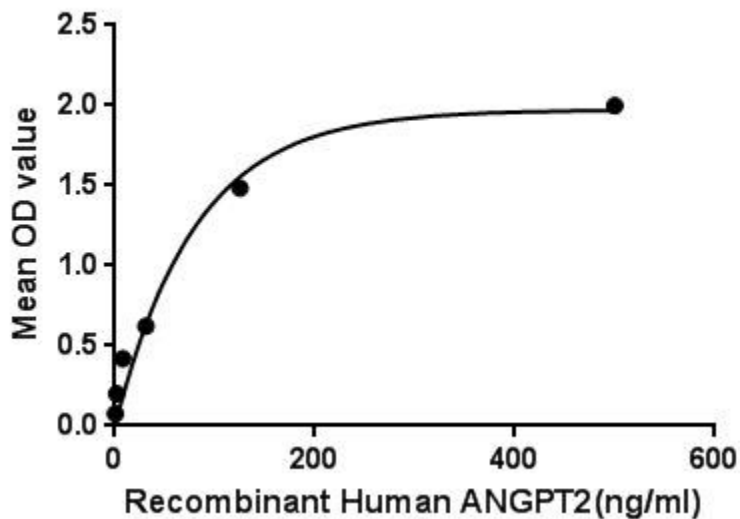


Figure 1. The binding activity of ANGPT2 with Tie2. Angiopoietin is part of a family of vascular growth factors that play a role in embryonic and postnatal angiogenesis. Angiopoietin cytokines are involved with controlling microvascular permeability, vasodilation, and vasoconstriction by signaling smooth muscle cells surrounding vessels. There are now four identified

angiopoietins: ANGPT1, ANGPT2, ANGPT3, ANGPT4. Angiopoietin 2 (ANGPT2) promotes cell death and disrupts vascularization. Yet, when it is in conjunction with vascular endothelial growth factors, or VEGF, it can promote neo-vascularization. Besides, TEK Tyrosine Kinase (Tie2) has been identified as an interactor of ANGPT2, thus a binding ELISA assay was conducted to detect the interaction of recombinant human ANGPT2 and recombinant human Tie2. Briefly, ANGPT2 were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to Tie2-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-ANGPT2 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 ANGPT2 and Tie2 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.

Image

CGATTGGATTGAGGCTGGAGGATGGGAGGAGATAGGTTGGATGGGTTCTGAGTACATTTCTCTGAGAGTGGACATGCGCTTCTCTGGGTTAGTGTGAACTGTGAGGGGACCGGCTTGGATGGATGATCGGTTGAGGCTGAACTGTGAGTGTGAGAGCATGTGGAT

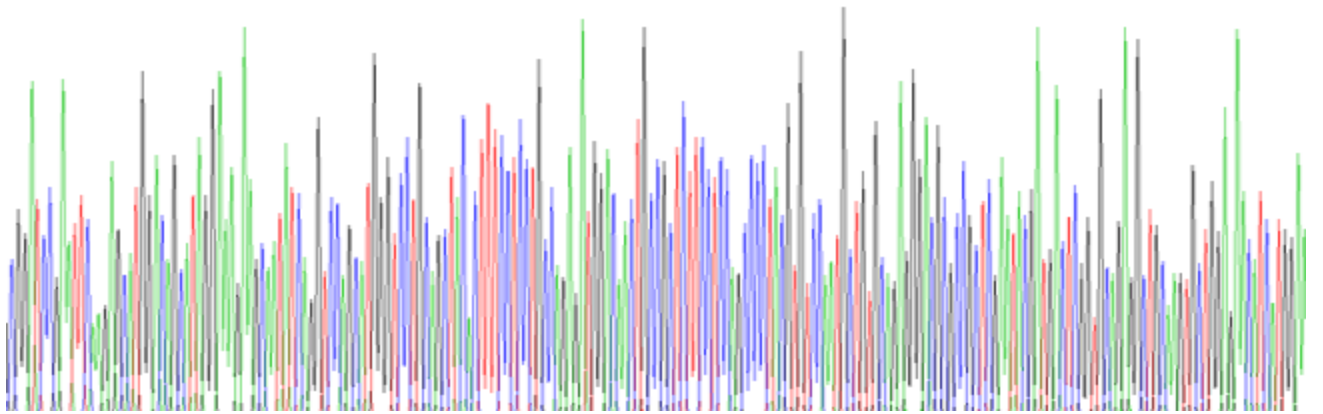


Figure . Gene Sequencing (extract)

Image

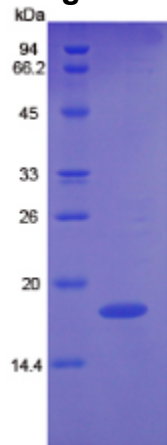


Figure. SDS-PAGE

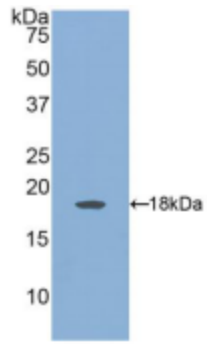


Figure. Western Blot

[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.