

Active Vitamin D Receptor (VDR) Instruction Manual

SBPA130Hu01

Homo sapiens (Human)

Buffer Formulation	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Traits	Freeze-dried powder
Purity	> 90%
Isoelectric Point	6.5
Applications	Cell culture; Activity Assays.

ACTIVITY TEST

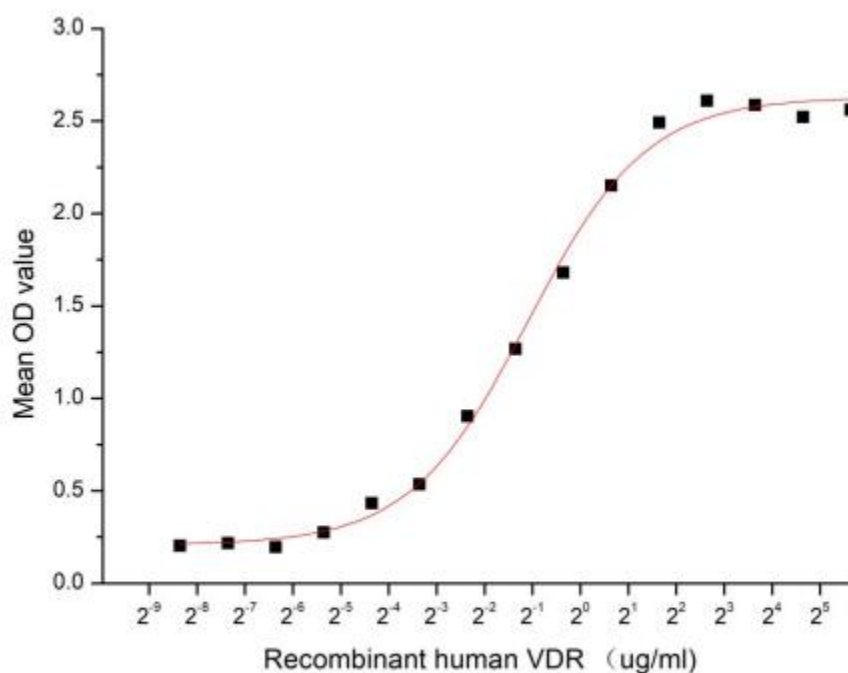


Figure 1. The binding activity of recombinant human VDR and human RXRa

Vitamin D Receptor (VDR) is the nuclear hormone receptor for vitamin D3. The receptor belongs to the family of trans-acting transcriptional regulatory factors and shows sequence similarity to the steroid and thyroid hormone receptors. It mediates the action of vitamin D3 by controlling the expression of hormone sensitive genes. Besides, Retinoid X Receptor Alpha (RXRa) has been identified as an interactor of VDR, thus a binding ELISA assay was conducted to detect the interaction of recombinant human VDR and

recombinant human RXRa. Briefly, VDR were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100 ul were then transferred to RXRa-coated microtiter wells and incubated for 1h at 37°C. Wells were aspirated and incubated for 1h with anti-VDR 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 µL stop solution to the wells and read at 450nm immediately. The binding activity of VDR and RXRa was shown in Figure 1, and this effect was in a dose dependent manner. The EC50 for this effect is 0.469 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

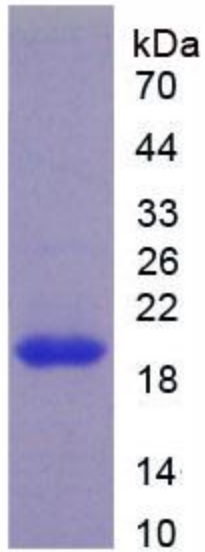


Figure. SDS-PAGE

[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.