APL820Hu01 100μg
Active Wingless Type MMTV Integration Site Family, Member 2 (WNT2)
Organism Species: *Homo sapiens* (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.
Host: *E. coli*
Residues: Ser26~Thr360
Tags: N-terminal His-tag
Purity: >95%
Endotoxin Level: <1.0EU per 1μg (determined by the LAL method).
Buffer Formulation: PBS, pH7.4, containing 0.01% SKL, 5%Trehalose .
Original Concentration: 200μg/mL
Applications: Activity Assays.
(May be suitable for use in other assays to be determined by the end user.)
Predicted isoelectric point: 9.2
Predicted Molecular Mass: 41.3kDa
Accurate Molecular Mass: 41kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.
Store at 2-8ºC for one month.
Aliquot and store at -80ºC 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 37ºC 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]

SWWYM RATGGSSRVM CDNVPGLVSS QRQLCHRHPD VMRAISQGVA EWTAECQHQF RQHRWNCNTL DRDHSLFGRV LLRSSRESAF VYAISSAGVV FAITRACSQG EVKSCSCDPK KMGSAKDSKG IFDWGGCSDN IDYGIKFARA FVDAKERKGK DARALMNLHN NRAGRKAVKR FLKQECKCHG VSGSCTLRTC WLAMADFRKT GDYLWRKYNG AIQVVMNQDG TGFTVANERF KKPTKNDLVY FENSPDYCIR DREAGSLGTA GRVCNLTSRG MDSCEVMCCG RGYDTSHVTR MTKCGCKFHW CCAVRCQDCL EALDVHTCKA PKNADWTTAT

[ACTIVITY]

WNT2, also known as wingless-type MMTV integration site family member 2, is a ligand for members of the frizzled family of seven transmembrane receptors. Can activate or inhibit canonical Wnt signaling, depending on receptor context. Stimulates cell migration. Decreases proliferation, migration, invasiveness and clonogenicity of carcinoma cells and may act as a tumor suppressor. Besides, Glypican 3 (GPC3) has been identified to bind to Wnt2 and modulate its activity, influencing the Wnt signaling pathway. Thus a binding ELISA assay was conducted to detect the interaction of recombinant human WNT2 and recombinant human GPC3.Briefly, biotin-linked GPC3 was diluted serially in PBS with 0.01% BSA (pH 7.4). Duplicate samples of 100 μl were then transferred to WNT2-coated microtiter wells and incubated for 1h at 37℃. Wells were washed with PBST 3 times and incubation with Streptavidin-HRP for 30min, then wells were aspirated and washed 5 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37℃.Finally, add 50 μL stop solution to the wells

and read at 450/630 nm immediately. Measured by its binding ability in a functional ELISA. When Recombinant WNT2 is Immobilized at 2 ug/mL(100 uLwell), the concentration of GPC3 that produces 50% optimal bindingresponse is found to be approximately0.0534ug/mL.

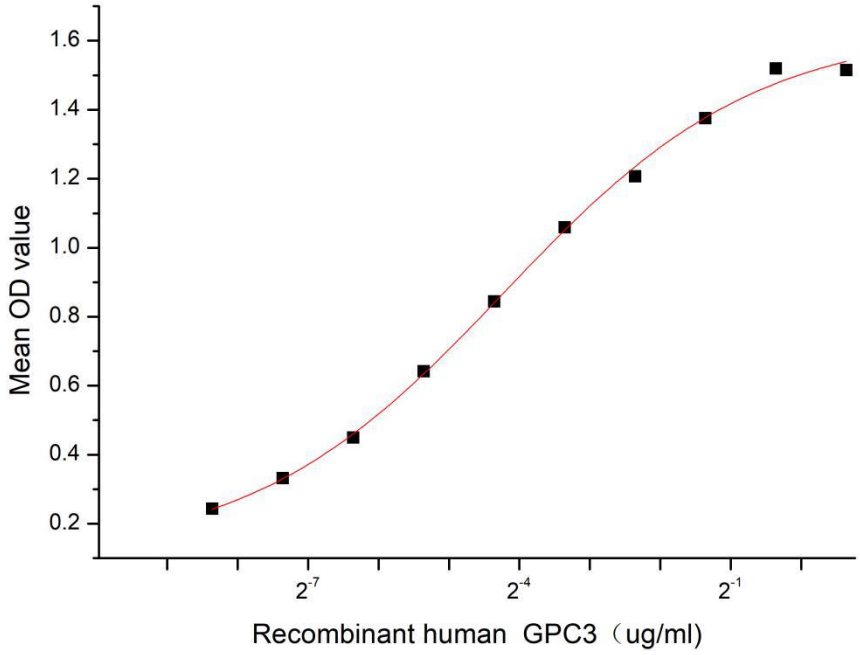

Figure 1. The binding activity of recombinant human WNT2 and recombinant human GPC3

[IDENTIFICATION]

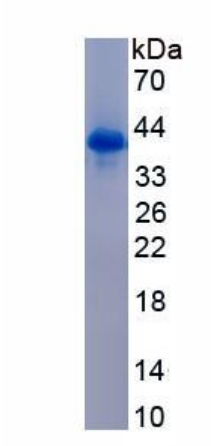

Figure 2. SDS-PAGE

Sample: Active recombinant WNT2, Human

[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.