

**APB040Hu01 100µg
Active Vimentin (VIM)**

**Organism Species: *Homo sapiens (Human)*
Instruction manual**

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

1st Edition (Apr, 2016)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Ser2~Glu466

Tags: N-terminal His-tag

Purity: >98%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 0.01% sarcosyl and 5% trehalose.

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 5.2

Predicted Molecular Mass: 52.4kDa

Accurate Molecular Mass: 53kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°C 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 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.

[SEQUENCE]

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STRSVSSSS YRRMFGGPGT ASRPSSRSY VTTSTRTYSL GSALRPSTSR
SLYASSPGGV YATRSSAVRL RSSVPGVRL QDSVDFSLAD AINTEFKNTR
TNEKVELQEL NDRFANYIDK VRFLEQQNKI LLAELEQLKG QGKSRLGDLY
EEMRELRQ VDQLTNDKAR VEVERDNLAE DIMRLREKLQ EEMLQREEAE
NTLQSFQDV DNASLARLDL ERKVESLQEE IAFLKKLHEE EIQELQAQIQ
EQHVQIDVDV SKPDLTAALR DVRQQYESVA AKNLQEAEEW YKSKFADLSE
AANRNNDALR QAKQESTEYR RQVQSLTCEV DALKGTNESL ERQMREMEEN
FAVEAANYQD TIGRLQDEIQ NMKEEMARHL REYQDLLNVK MALDIEIATY
RKLLEGEESR ISLPLPNFSS LNLRETNLDS LPLVDTHSKR TLLIKTVETR
DGQVINETSQ HHDDLE
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[ACTIVITY]

Vimentin (VIM) is a type III intermediate filament (IF) protein that is expressed in mesenchymal cells. vimentin is the major cytoskeletal component of mesenchymal cells. Because of this, vimentin is often used as a marker of mesenchymally-derived cells or cells undergoing an epithelial-to-mesenchymal transition (EMT) during both normal development and metastatic progression. Besides, Keratin 20 (KRT20) has been identified as an interactor of VIM, thus a binding ELISA assay was conducted to detect the interaction of recombinant human VIM and recombinant human KRT20. Briefly, VIM were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100µl then transferred to KRT20-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-VIM pAb, then aspirated and washed 3



Figure 3. SDS-PAGE

Sample: Active recombinant VIM, Human

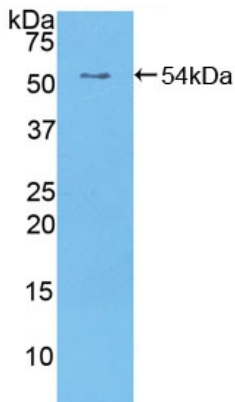


Figure 4. Western Blot

Sample: Recombinant VIM, Human;

Antibody: Rabbit Anti-Human VIM Ab (PAB040Hu01)

[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.