

Prokineticin 2 (PK2) Active Protein | PK2 active protein

Active Prokineticin 2 (PK2)

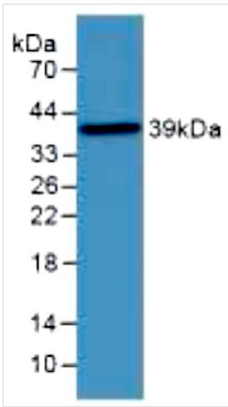
CATALOG # AAA149227	HOST E. coli	REACTIVITY Homo sapiens (Human)	APPLICATIONS Activity Assay, Cell Culture
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PRODUCT SYNONYMS

Prokineticin 2 (PK2); Active Prokineticin 2 (PK2); PK-2; Bv8; MIT1; KAL4; Protein Bv8 Homolog; PK2 active protein

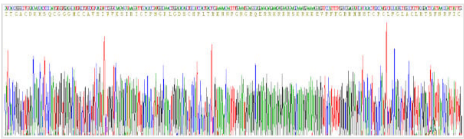
PRODUCT SPECIFICATIONS

Host	E. coli
Reactivity	Homo sapiens (Human)
Purity/Purification	>95%
Form/Format	20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose.
Concentration	Original Concentration: 400ug/mL (varies by lot)
Applicable Applications for PK2 active protein	Activity Assay, Cell Culture
Source	Prokaryotic expression
Residues	Ile30~Gln128
Tags	Two N-terminal Tags, His-tag and GST-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	10.2
Usage	Reconstitute in ddH2O to a concentration ?0.1mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree 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 degree 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.



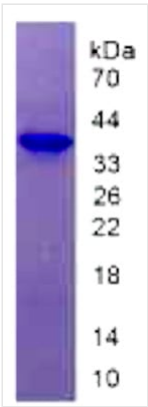
WB (Western Blot)

Western BlotSample: Recombinant PK2, Human;Antibody: Rabbit Anti-Human PK2 Ab

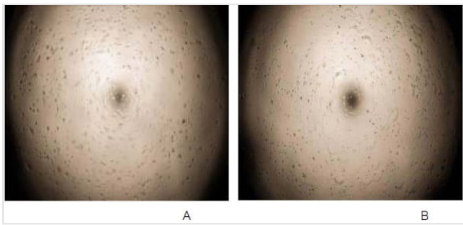


Identification

Gene Sequencing (extract)



SDS_PAGE



Bioactivity

Prokineticin 2 (PK2) is a memeber of prokineticin family. Prokineticin is a secreted protein that potently contracts gastrointestinal smooth muscle. They are thought to be involved in several important physiological processes like neurogenesis, tissue development, angiogenesis, and nociception. Other important physiological roles the Bv8/Prokineticins (PKs) are involved in may include cancer, reproduction, and regulating physiological functions that influence circadian rhythms like hormone secretion, ingestive behaviors, and the sleep/wake cycle. To test the effect of PK2 on cell proliferation, HCT116 colon cancer cells were seeded into triplicate wells of 96-well plates at a density of 5,000 cells/well and allowed to attach, replaced with serum-free overnight, then the medium was replaced with 2% serum standard DMEM containing various concentrations of recombinant human PK2. After incubated for 96h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10uL of CCK-8 solution was added to each well of the plate, then the absorbance at 450nm was measured using a microplate reader after incubating the plate for 1-4 hours at 37°C. Proliferation of HCT116 cells after incubation with PK2 for 96h observed by inverted microscope was shown in Figure 1. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant PK2 for 96h. The result was shown in Figure 2. It was obviously that PK2 significantly increased cell viability of HCT116 cells.

WVKSIRICTP MGKLGDSCHP LTRKNFNGG RQERRKRKRS KRKKEVPFFG
RRMHHTCPCL PGLACLRTSF NRFICLAQ

Sequence

ADDITIONAL INFORMATION

Product Categories/Family for PK2 active protein	Neuroscience
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NCBI AND UNIPROT INFORMATION

NCBI GI #	187167261
NCBI GeneID	60675
NCBI Accession #	NP_001119600.1
NCBI GenBank Nucleotide #	NM_001126128.2
UniProt Accession #	Q9HC23

Molecular Weight	Predicted Molecular Mass: 41.2kDa Accurate Molecular Mass: 39kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	prokineticin-2 isoform a
NCBI Official Synonym Full Names	prokineticin 2
NCBI Official Symbol	PROK2
NCBI Official Synonym Symbols	BV8; HH4; PK2; KAL4; MIT1
NCBI Protein Information	prokineticin-2
UniProt Protein Name	Prokineticin-2
UniProt Gene Name	PROK2
UniProt Synonym Gene Names	BV8; PK2
UniProt Entry Name	PROK2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-homo-sapiens-human-active-protein/prokineticin-2-pk2/149227>