

Product Name: KD-Validated Phospho-PKR (T451) Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA00208

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 62.1kDa

Antigen Information

Gene Name	EIF2AK2
Alternative Names	eIF-2A protein kinase 2; Protein kinase RNA-activated; PKR; p68 kinase; P1/eIF-2A protein kinase
Gene ID	5610.0
SwissProt ID	P19525
Immunogen	A synthesized peptide derived from human Phospho-Phospho-PKR (T451)

Background

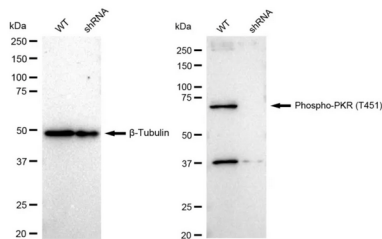
The protein encoded by this gene is a serine/threonine protein kinase that is activated by autophosphorylation after binding to dsRNA. The activated form of the encoded protein can phosphorylate translation initiation factor EIF2S1, which in turn inhibits

protein synthesis. This protein is also activated by manganese ions and heparin. The encoded protein plays an important role in the innate immune response against multiple DNA and RNA viruses. [provided by RefSeq, Jul 2021]

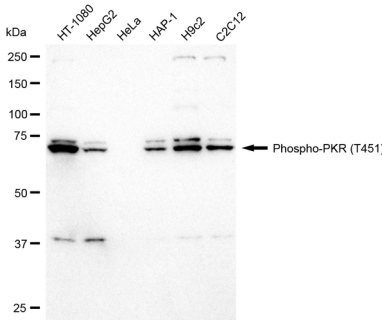
Research Area

Signal Transduction

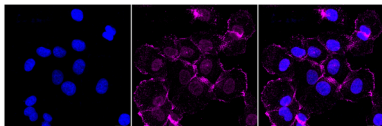
Image Data



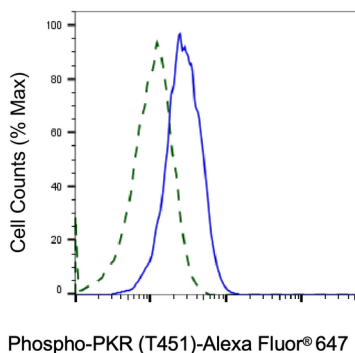
Western blotting analysis using Phospho-PKR (T451) antibody (KVA00208). Phospho-PKR (T451) expression in wild type (WT) and phospho-PKR (T451) shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with Phospho-PKR (T451) antibody (KVA00208, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



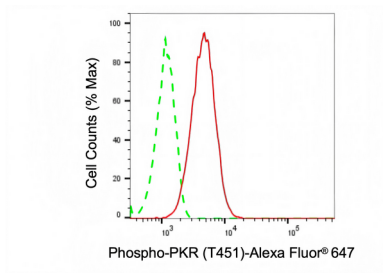
Western blotting analysis using Phospho-PKR (T451) antibody (KVA00208). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Phospho-PKR (T451) antibody (KVA00208, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HT-1080 cells with Phospho-PKR (T451) antibody (KVA00208, 1:1,000). Nuclei were stained blue with DAPI; Phospho-PKR (T451) was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Validation of PKR knockdown using flow cytometry. Wild-type (WT, Blue) and knockdown (KD, Green) HeLa cells were stained with Phospho-PKR (T451) antibody (KVA00208, 1:2,000) and analyzed using CytoFLEX.



Flow cytometric analysis of phospho-PKR (T451) expression in HT-1080 cells using phospho-PKR (T451) antibody (KVA00208, 1:2,000). Green, isotype control; red, phospho-PKR (T451).