

Phospho-EIF2AK2 (T446) Recombinant Antibody



RACO0064

Product Information

Size:

50ul

Reactivity:

Human

Source:

Human

Isotype:

Rabbit IgG

Applications:

ELISA, WB, IHC, IF

Recommended dilutions:

WB:1:500-1:5000, IHC:1:50-1:200, IF:1:20-1:200

Protein Background:

IFN-induced dsRNA-dependent serine/threonine-protein kinase which plays a key role in the innate immune response to viral infection and is also involved in the regulation of signal transduction, apoptosis, cell proliferation and differentiation. Exerts its antiviral activity on a wide range of DNA and RNA viruses including hepatitis C virus (HCV), hepatitis B virus (HBV), measles virus (MV) and herpes simplex virus 1 (HHV-1). Inhibits viral replication via phosphorylation of the alpha subunit of eukaryotic initiation factor 2 (EIF2S1), this phosphorylation impairs the recycling of EIF2S1 between successive rounds of initiation leading to inhibition of translation which eventually results in shutdown of cellular and viral protein synthesis. Also phosphorylates other substrates including p53/TP53, PPP2R5A, DHX9, ILF3, IRS1 and the HHV-1 viral protein US11.

Gene ID:

EIF2AK2

Uniprot

P19525

Synonyms:

Interferon-induced, double-stranded RNA-activated protein kinase, Eukaryotic translation initiation factor 2-alpha kinase 2, eIF-2A protein kinase 2, Interferon-inducible RNA-dependent protein kinase, P1/eIF-2A protein kinase, Protein kinase RNA-activated, PKR, Protein kinase R, EIF2AK2, PKR, PRKR

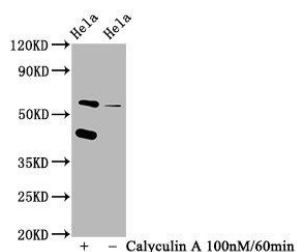
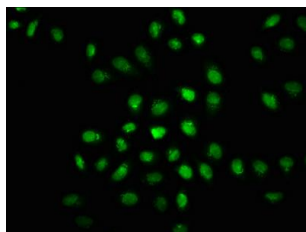
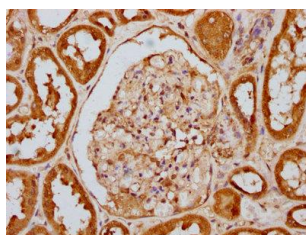
Immunogen:

A synthesized peptide derived from human Phospho-EIF2AK2 (T446).

Storage:

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Product Images



IHC image of RACO0064 diluted at 1:100 and staining in paraffin-embedded human kidney tissue performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a biotinylated secondary antibody and visualized using an HRP conjugated SP system.

Immunofluorescence staining of HeLa cells (treated with 50mM Calyculin A for 30min) with RACO0064 at 1:100, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeabilized using 0.2% Triton X-100 and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. The secondary antibody was Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Western Blot

Positive WB detected in (HeLa whole cell lysate) (treated with Calyculin A or not)

All lanes: Phospho-EIF2AK2 antibody at 1.25µg/ml

Secondary

Goat polyclonal to rabbit IgG at 1:50000 dilution

Predicted band size: 62 KDa

Observed band size: 62 KDa