

Product datasheet

Anti-VRK1 antibody ab211358

4 Images

Overview

Product name	Anti-VRK1 antibody
Description	Rabbit polyclonal to VRK1
Host species	Rabbit
Tested applications	Suitable for: WB, IHC-P, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat, Cow 
Immunogen	Recombinant fragment corresponding to Human VRK1 aa 5-141. Sequence: KAAQAGRQSSAKRHLAEQFAVGEIITDMAKKEWKVGL PIQGQGFGCYLA DMNSSESVGSDAPCVVKVEPSDNGPLFTELKFYQRA AKPEQIQKWIRTRK LKYLGVPKYWGSGLHDKNGKSYRFMIMDRFGSDLQKI Database link: Q99986  Run BLAST with  Run BLAST with
Positive control	IHC: Human testis tissue; ICC/IF: U-251 MG cells. WB: Rh30 and HL-60 cell lysates

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.02% Sodium azide Constituents: 59% PBS, 40% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Applications

Our [Abpromise guarantee](#) covers the use of **ab211358** in the following tested applications.

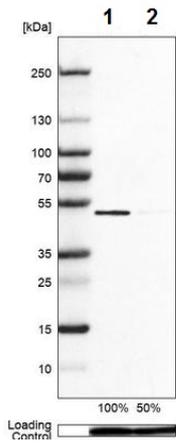
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/250 - 1/500. Predicted molecular weight: 45 kDa.
IHC-P		1/50 - 1/200. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		Use a concentration of 1 - 4 µg/ml. Fixation/Permeabilization: PFA/Triton X-100.

Target

Function	Serine/threonine kinase that phosphorylates 'Thr-18' of p53/TP53 and may thereby prevent the interaction between p53/TP53 and MDM2.
Tissue specificity	Widely expressed. Highly expressed in fetal liver, testis and thymus.
Involvement in disease	Defects in VRK1 are the cause of pontocerebellar hypoplasia type 1 (PCH1) [MIM:607596]; also called pontocerebellar hypoplasia with infantile spinal muscular atrophy or pontocerebellar hypoplasia with anterior horn cell disease. PCH1 is characterized by an abnormally small cerebellum and brainstem, central and peripheral motor dysfunction from birth, gliosis and anterior horn cell degeneration resembling infantile spinal muscular atrophy (SMA).
Sequence similarities	Belongs to the protein kinase superfamily. CK1 Ser/Thr protein kinase family. VRK subfamily. Contains 1 protein kinase domain.
Post-translational modifications	Autophosphorylated at various serine and threonine residues. Autophosphorylation does not impair its ability to phosphorylate p53/TP53.
Cellular localization	Nucleus. Dispersed throughout the cell but not located on mitotic spindle or chromatids during mitosis.

Images



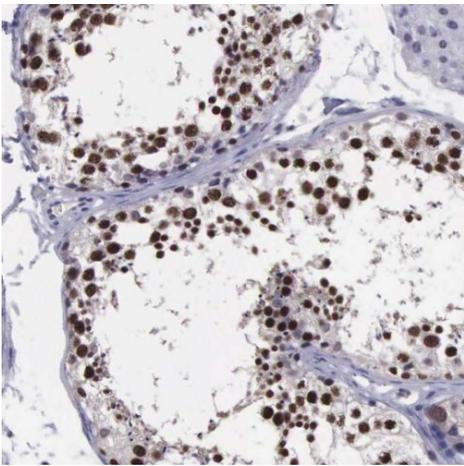
Western blot - Anti-VRK1 antibody (ab211358)

All lanes : Anti-VRK1 antibody (ab211358) at 0.4 $\mu\text{g/ml}$

Lane 1 : Rh30 cell lysate with siRNA control

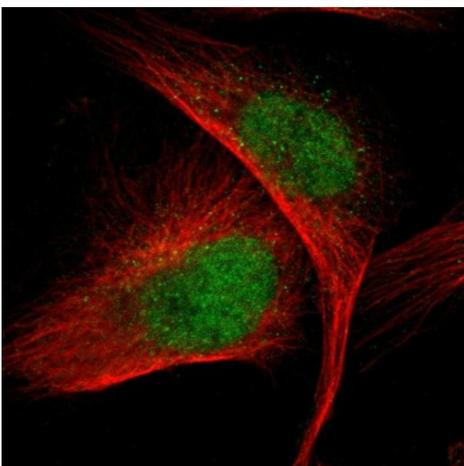
Lane 2 : Rh30 cell lysate with siRNA Target specific probe

Predicted band size: 45 kDa



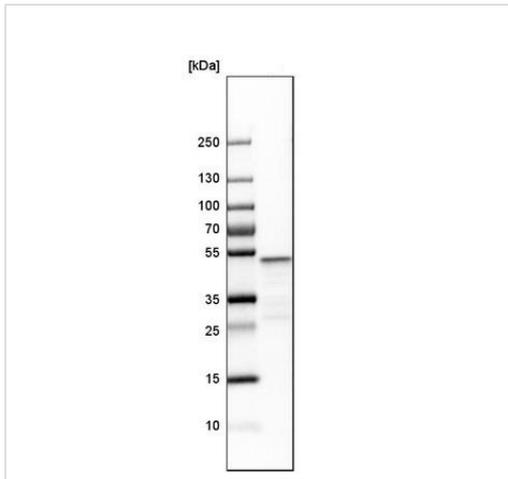
Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling VRK1 with ab211358 at 1/200 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-VRK1 antibody (ab211358)



Immunofluorescent analysis of PFA-fixed, Triton X-100 permeabilized U-251 MG cells labeling VRK1 with ab211358 at 4 $\mu\text{g/ml}$.

Immunocytochemistry/ Immunofluorescence - Anti-VRK1 antibody (ab211358)



Western blot - Anti-VRK1 antibody (ab211358)

Anti-VRK1 antibody (ab211358) at 0.4 $\mu\text{g/ml}$ + HL-60 (Human promyelocytic leukemia) cell lysate

Predicted band size: 45 kDa

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