

# DOK4 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7692b

#### **Product Information**

Application WB, IHC-P, E Primary Accession Q8TEW6

Other Accession Q99KE3, NP 060580

Reactivity Human
Predicted Mouse
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 37028
Antigen Region 228-258

### **Additional Information**

**Gene ID** 55715

Other Names Docking protein 4, Downstream of tyrosine kinase 4, Insulin receptor

substrate 5, IRS-5, IRS5, DOK4

**Target/Specificity**This DOK4 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 228-258 amino acids from the

C-terminal region of human DOK4.

**Dilution** WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation

followed by dialysis against PBS.

**Storage** Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** DOK4 Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

#### **Protein Information**

Name DOK4

**Function** DOK proteins are enzymatically inert adaptor or scaffolding proteins. They

provide a docking platform for the assembly of multimolecular signaling complexes. DOK4 functions in RET-mediated neurite outgrowth and plays a

positive role in activation of the MAP kinase pathway (By similarity). Putative link with downstream effectors of RET in neuronal differentiation. May be involved in the regulation of the immune response induced by T-cells.

#### **Tissue Location**

Widely expressed. High expression in skeletal muscle, heart, kidney and liver. Weaker expression in spleen, lung and small intestine, brain, heart and. Expressed in both resting and activated peripheral blood T-cells.

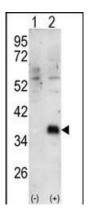
## **Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The tyrosine kinase (TK) group is mainly involved in the regulation of cell-cell interactions such as differentiation, adhesion, motility and death. There are currently about 90 TK genes sequenced, 58 are of receptor protein TK (e.g. EGFR, EPH, FGFR, PDGFR, TRK, and VEGFR families), and 32 of cytosolic TK (e.g. ABL, FAK, JAK, and SRC families).

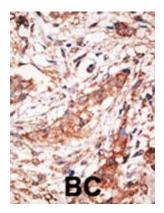
## References

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# **Images**



Western blot analysis of DOK4 (C-term) (arrow) using DOK4 Antibody (C-term) (Cat.#AP7692b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the DOK4 gene (Lane 2) (Origene Technologies).



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

## **Citations**

SRC family kinase activity is up-regulated in hormone-refractory prostate cancer.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.