

## Basic Information

Product Name	Anti-VEGFR2/KDR Antibody
Gene Name	KDR
Source	Rabbit
Isotype	IgG
Species Reactivity	human
Tested Application	WB
Contents	500 ug/ml antibody with PBS , 0.02% Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> , 1 mg BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human KDR (29-60aa LDLPRLSIQKDILTILKANTTLQITCRGQRDLN), different from the related mouse and rat sequences by three amino acids.
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	152KD
Dilution Ratios	Western blot(WB):1:500-2000

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

KDR (Kinase Insert Domain Receptor), also known as FLK1, VEGFR or VEGFR2, is a VEGF receptor. KDR is the human gene encoding it. Sait et al. (1995) likewise corrected the assignment to chromosome 4q11-q12 to the same region occupied also by PDGFRA and KIT, thus indicating the location of a cluster of receptor tyrosine kinase genes. Vascular endothelial growth factor (VEGF) is the only mitogen that specifically acts on endothelial cells. Its expression is upregulated by hypoxia, and its cell-surface receptor, known as fetal liver kinase-1 (Flk1) in mouse, is exclusively expressed in endothelial cells (Plate et al., 1993). Flk1 is the mouse homolog of KDR (Matthews et al., 1991).

## Selected Validation Data

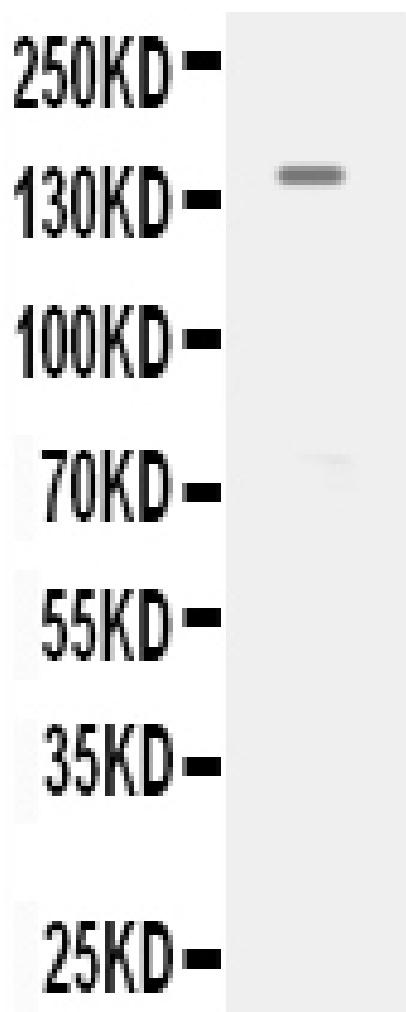


Figure 1. Western blot analysis of KDR using anti-KDR antibody (PB0410). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: MCF-7 Whole Cell Lysate After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-KDR antigen affinity purified polyclonal antibody (Catalog # PB0410) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for KDR at approximately 152KD. The expected band size for KDR is at 152KD.