

Product name:	Robo2 Rabbit Polyclonal Antibody
Cat number:	ABN17307
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	The antiserum was produced against synthesized peptide derived from human ROBO2. AA range:237-286
Reactivity:	Human,Mouse,Rat
Applications:	IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

The protein encoded by this gene belongs to the ROBO family, part of the immunoglobulin superfamily of proteins that are highly conserved from fly to human. The encoded protein is a transmembrane receptor for the slit homolog 2 protein and functions in axon guidance and cell migration. Mutations in this gene are associated with vesicoureteral reflux, characterized by the backward flow of urine from the bladder into the ureters or the kidney. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014],disease:A chromosomal aberration involving ROBO2 is a cause of multiple congenital abnormalities, including severe bilateral VUR with ureterovesical junction defects. Translocation t(Y;3)(p11;p12) with PCDH11Y. This translocation disrupts ROBO2 and produces dominant-negative ROBO2 proteins that abrogate SLIT-ROBO signaling in vitro.,disease:Defects in ROBO2 are the cause of vesicoureteral reflux type 2 (VUR2) [MIM:610878]. VUR is a complex, genetically heterogeneous developmental disorder characterized by the retrograde flow of urine from the bladder into the ureter and is associated with reflux nephropathy, the cause of 15% of end-stage renal disease in children and young adults.,function:Receptor for SLIT2, and probably SLIT1, which are thought to act as molecular guidance cue in cellular migration, including axonal navigation at the ventral midline of the neural tube and projection of axons to different regions during neuronal development.,similarity:Belongs to the immunoglobulin superfamily. ROBO family.,similarity:Contains 3 fibronectin type-III domains.,similarity:Contains 5 Ig-like C2-type (immunoglobulin-like) domains.,subunit:Interacts with SLIT2.,