

Anti-LRP2 Antibody (4D205)

Product Details

Ig Type:	Rabbit IgG
Reactivity:	Human
Conjugation:	Unconjugated
Clone:	4D205
Purification:	Affinity-chromatography

Applications

Verified Activity:	Overlay Peak curve showing MCF7 cells stained with TMAH-00705 (red line) at 1:100. The cells were fixed in 4% formaldehyde and permeated by 0.2% TritonX-100. Then 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1ug/1*10 ⁶ cells) for 45min at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-rabbit IgG (H+L) at 1:200 dilution for 35min at 4°C. Control antibody (green line) was rabbit IgG (1ug/1*10 ⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.
Application:	ELISA,FCM
Recommended	FCM:1:50-1:200.

Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	A synthetic peptide: Human LRP2
Antigen Species:	Human
Gene ID:	4036
Uniprot ID:	P98164
Biology Area:	Cancer, Cardiovascular, Developmental biology, Metabolism, Stem cells

Research Background

Multiligand endocytic receptor. Acts together with CUBN to mediate endocytosis of high-density lipoproteins. Mediates receptor-mediated uptake of polybasic drugs such as aprotinin, aminoglycosides and polymyxin B. In the kidney, mediates the tubular uptake and clearance of leptin. Also mediates transport of leptin across the blood-brain barrier through endocytosis at the choroid plexus epithelium. Endocytosis of leptin in neuronal cells is required for hypothalamic leptin signaling and leptin-mediated regulation of feeding and body weight. Mediates endocytosis and subsequent lysosomal degradation of CST3 in kidney proximal tubule cells. Mediates renal uptake of 25-hydroxyvitamin D3 in complex with the vitamin D3 transporter GC/DBP. Mediates renal uptake of metallothionein-bound heavy metals. Together with CUBN, mediates renal reabsorption of myoglobin. Mediates renal uptake and subsequent lysosomal degradation of APOM. Plays a role in kidney selenium homeostasis by mediating renal endocytosis of selenoprotein SEPP1. Mediates renal uptake of the antiapoptotic protein BIRC5/survivin which may be

important for functional integrity of the kidney. Mediates renal uptake of matrix metalloproteinase MMP2 in complex with metalloproteinase inhibitor TIMP1. Mediates endocytosis of Sonic hedgehog protein N-product (ShhN), the active product of SHH. Also mediates ShhN transcytosis. In the embryonic neuroepithelium, mediates endocytic uptake and degradation of BMP4, is required for correct SHH localization in the ventral neural tube and plays a role in patterning of the ventral telencephalon. Required at the onset of neurulation to sequester SHH on the apical surface of neuroepithelial cells of the rostral diencephalon ventral midline and to control PTCH1-dependent uptake and intracellular trafficking of SHH. During neurulation, required in neuroepithelial cells for uptake of folate bound to the folate receptor FOLR1 which is necessary for neural tube closure. In the adult brain, negatively regulates BMP signaling in the subependymal zone which enables neurogenesis to proceed. In astrocytes, mediates endocytosis of ALB which is required for the synthesis of the neurotrophic factor oleic acid. Involved in neurite branching. During optic nerve development, required for SHH-mediated migration and proliferation of oligodendrocyte precursor cells. Mediates endocytic uptake and clearance of SHH in the retinal margin which protects retinal progenitor cells from mitogenic stimuli and keeps them quiescent. Plays a role in reproductive organ development by mediating uptake in reproductive tissues of androgen and estrogen bound to the sex hormone binding protein SHBG. Mediates endocytosis of angiotensin-2. Also mediates endocytosis of angiotensin 1-7. Binds to the complex composed of beta-amyloid protein 40 and CLU/APOJ and mediates its endocytosis and lysosomal degradation. Required for embryonic heart development. Required for normal hearing, possibly through interaction with estrogen in the inner ear.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481