

# Rabbit Anti-DIF14/LMBR1 antibody

# SL9563R

Product Name:	DIF14/LMBR1
Chinese Name:	分化相关基因14抗体
Alias:	ACHP; C7orf2; DIF 14; DIF14; Differentiation related gene 14; Differentiation related gene 14 protein; Differentiation-related gene 14 protein; FLJ11665; Limb region 1 homolog (mouse); Limb region 1 homolog; Limb region 1 protein; Limb region 1 protein homolog; LMBR 1; LMBR1; LMBR1_HUMAN; PPD 2; PPD2; TPT.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit, Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	55kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human LMBR1/DIF14:301-400/490 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	LMBR1 is a 490 amino acid multi-pass membrane protein that is widely expressed with strongest expression in heart and pancreas. Belonging to the LIMR family, LMBR1 shares 95% sequence identity with the mouse protein and may play crucial role in the

evolution of limb and skeletal system. LMBR1 is critical for expression of sonic hedgehog (Shh) in the developing posterior limb bud mesenchyme. Mutations in the gene encoding LMBR1 is the cause of several rare conditions such as acheiropody (ACHP) and syndactyly type 4 (SDYT4). ACHP is an autosomal recessive inherited disorder characterized by bilateral congenital amputations of the hands and feet. LMBR1L (limb region 1 protein homolog-like), also known as LIMR (Lipocalin-1-interacting membrane receptor), is a 489 amino acid multi-pass membrane protein that is thought to act as a receptor for Lipocalin-1 and may also assist in its endocytosis.

# **Function:**

Putative membrane receptor.

#### **Subcellular Location:**

Membrane.

# Tissue Specificity:

Widely expressed with strongest expression in heart and pancreas.

#### DISEASE:

Defects in LMBR1 are associated with preaxial polydactyly type 2 (PPD2); also known as polydactyly of triphalangeal thumb. Polydactyly consists of duplication of the distal phalanx. The thumb in PPD2 is usually opposable and possesses a normal metacarpal. The mutations do not change the normal expression of LMBR1, but alter the expression of SHH by disrupting a long-range, cis-regulatory element of that gene.

# Similarity:

Belongs to the LIMR family.

# **SWISS:**

O8WVP7

# Gene ID:

64327

#### Database links:

Entrez Gene: 64327 Human

Entrez Gene: 56873 Mouse

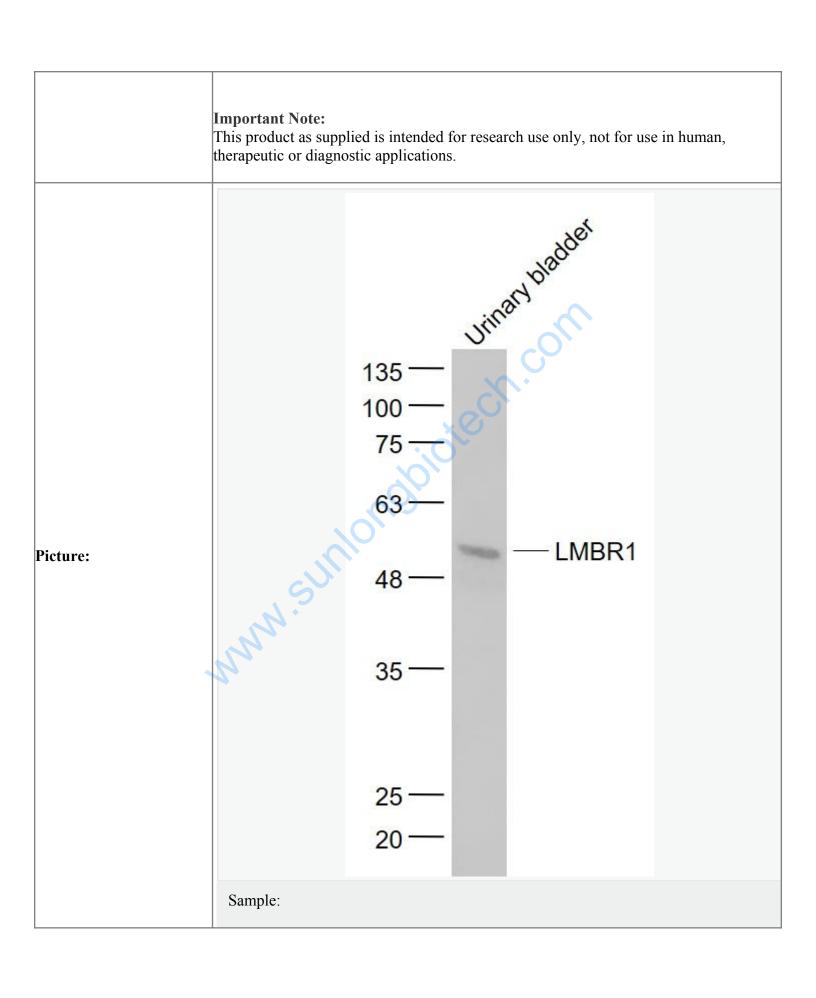
Entrez Gene: 362295Rat

Omim: 605522Human

SwissProt: Q8WVP7Human

SwissProt: Q9JIT0Mouse

Unigene: 209989Human



Urinary bladder (Mouse) Lysate at 40 ug

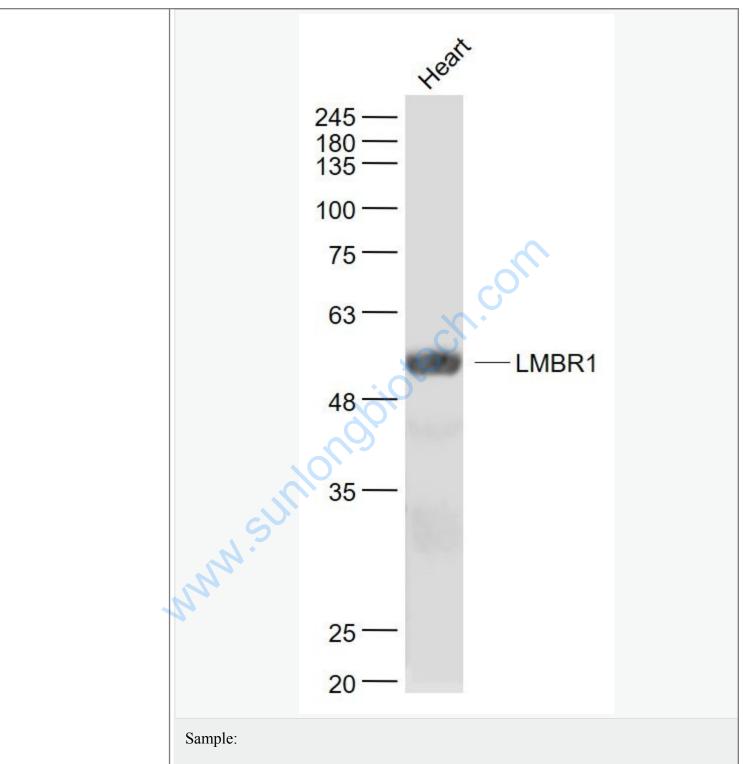
Primary: Anti- DIF14/LMBR1 (SL9563R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 55 kD

Observed band size: 55 kD





Heart (Mouse) Lysate at 40 ug

Primary: Anti- DIF14/LMBR1 (SL9563R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 55 kD
Observed band size: 55 kD

