

# Rabbit Anti-GPR56 antibody

# SL11848R

Product Name:	GPR56
Chinese Name:	蛋白偶联受体56抗体
Alias:	BFPP; DKFZp781L1398; EGF TM7 like; G protein coupled receptor 56; GPR 56; Polymicrogyria bilateral frontoparietal; TM7LN4; TM7XN1; TM7XN1 protein; GPR56 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000
	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	78kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human GPR56:275-350/693 <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:	PubMed
Product Detail:	G protein-coupled receptors (GPRs or GPCRs), also known as seven transmembrane receptors, heptahelical receptors, or 7TM receptors, are members of the largest protein family and play a role in many different stimulus-response pathways. G-protein coupled receptors mediate extracellular signals into intracellular signals (G-protein activation). They respond to a great variety of signaling molecules, including hormones,

neurotransmitters and other proteins and peptides. GPR proteins are integral seven-pass membrane proteins with some conserved amino acid regions. G-protein coupled receptor 56 (GPR56), also designated TM7XN1 protein, contains one GPS domain. GPR56 plays an important role in cell-cell interactions and is widely expressed, with highest levels detected in brain, heart and thyroid gland. Defects in the gene encoding for GPR56 can cause bilateral frontoparietal polymicrogyria (BFPP) which is characterized by disorganized cortical lamination.

#### Function:

GPR56 contains 7 transmembrane domains as well as a mucin-like domain and cysteine box in the N-terminal region. Its expression is widely distributed and the highest levels can be found in brain, thyroid gland and heart. It is also expressed in a great number of tumor cells. Results show that mutations in GPR56 cause a human brain cortical malformation called bilateral frontoparietal polymicrogyria (BFPP); data suggest that GPR56 signaling plays an essential role in regional development of human cerebral cortex.

#### **Subcellular Location:**

Cell membrane. Multi-pass membrane protein.

## **Tissue Specificity:**

Widely distributed with highest levels found in thyroid gland, brain and heart. Expressed in a great number of tumor cells.

#### Post-translational modifications:

The endogenous protein is proteolytically cleaved into 2 subunits, an extracellular subunit and a seven-transmembrane subunit.

#### **DISEASE:**

Defects in GPR56 are the cause of bilateral frontoparietal polymicrogyria (BFPP) [MIM:606854]. BFPP is characterized by disorganized cortical lamination that is most severe in frontal cortex.

### Similarity:

Belongs to the G-protein coupled receptor 2 family. LN-TM7 subfamily. Contains 1 GPS domain

#### **SWISS:**

Q9Y653

#### Gene ID:

9289

#### Database links:

Entrez Gene: 9289Human

Entrez Gene: 14766Mouse Entrez Gene: 260326Rat Omim: 604110Human SwissProt: Q9Y653Human SwissProt: Q8K209Mouse SwissProt: Q8K3V3Rat Unigene: 513633Human Unigene: 290834Mouse Unigene: 1677Rat Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. GPR56 48-Picture: 35-25-20-17-Sample:

K562 Cell (Human) Lysate at 40 ug

Heart (Mouse) Lysate at 40 ug

Primary: Anti-GPR56 (SL11848R) at 1/300 dilution

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

Predicted band size: 78 kD

Observed band size: 75 kD