

# Rabbit Anti-FLVCR antibody

## SL12344R

<b>Product Name:</b>	FLVCR
Chinese Name:	白血病病毒C亚类受体蛋白FLVCR抗体
Alias:	Feline leukemia virus subgroup C cellular receptor; Feline leukemia virus subgroup C receptor; Feline leukemia virus subgroup C receptor related protein 1; Feline leukemia virus subgroup C receptor-related protein 1; FLVC1_HUMAN; FLVCR 1; FLVCR protein; FLVCR1; hFLVCR.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Pig, Horse,
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:	60kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from Human FLVCR:451-550/555
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:	FLVCR is responsible for the exportation of cytoplasmic heme groups. It is believed that it may protect developing erythroid cells from heme toxicity. Expression of FLVCR in cells will cause susceptibility to FeLV-C (Feline leukemia virus subgroup C) in vitro. FLVCR is found in all hematopoietic tissues, including peripheral blood lymphocytes

and fetal liver, and some expression is found in pancreas and kidney. It is down-regulated in haemopoietic progenitor cells undergoing differentiation and hemoglobinization.

### Function:

Heme transporter that exports cytoplasmic heme. It can also export coproporphyrin and protoporphyrin IX, which are both intermediate products in the heme biosynthetic pathway. Does not export bilirubin. Heme export depends on the presence of HPX and may be required to protect developing erythroid cells from heme toxicity. Heme export also provides protection from heme or ferrous iron toxicities in liver and brain. Causes susceptibility to FeLV-C in vitro.

#### Subunit:

Interacts with HPX.

### **Subcellular Location:**

Cell membrane.

## **Tissue Specificity:**

Found all hematopoietic tissues including peripheral blood lymphocytes. Some expression is found in pancreas and kidney.

## **DISEASE:**

Defects in FLVCR1 are the cause of posterior column ataxia with retinitis pigmentosa (PCARP) [MIM:609033]. A neurodegenerative syndrome beginning in infancy with areflexia and retinitis pigmentosa. Nyctalopia (night blindness) and peripheral visual field loss are usually evident during late childhood or teenage years, with subsequent progressive constriction of the visual fields and loss of central retinal function over time. A sensory ataxia caused by degeneration of the posterior columns of the spinal cord results in a loss of proprioceptive sensation that is clinically evident in the second decade of life and gradually progresses. Scoliosis, camptodactyly, achalasia, gastrointestinal dysmotility, and a sensory peripheral neuropathy are variable features of the disease. Affected individuals have no clinical or radiological evidence of cerebral or cerebellar involvement. Note=Defective neuronal heme transmembrane export due to FLVCR1 mutations may abrogate the neuroprotective effects of neuroglobin and initiate an apoptotic cascade that results in the selective degeneration of photoreceptors in the neurosensory retina and sensory neurons in the posterior spinal cord.

## Similarity:

Belongs to the major facilitator superfamily.

Feline leukemia virus subgroup C receptor (TC 2.A.1.28.1) family.

## **SWISS:**

Q9Y5Y0

## Gene ID:

	28982
	Database links:
	Entrez Gene: 28982 Human
	Omim: 609144 Human
	SwissProt: Q9Y5Y0 Human
	Unigene: 592816 Human
	Unigene: 7055 Human
	Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	180 — 135 — 100 — 75 — 63 — 48 — 25 — 20 — 17 —
	Sample:

SP2/0(Mouse) Cell Lysate at 30 ug

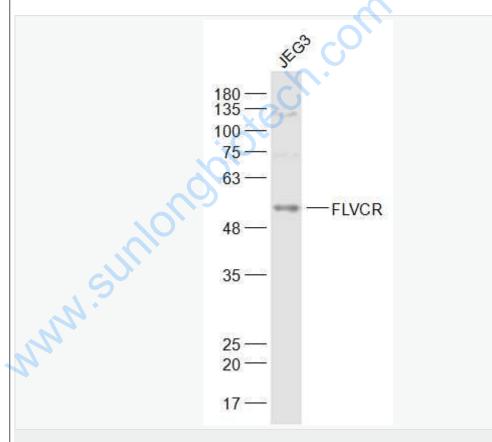
Cerebrum (Mouse) Lysate at 40 ug

Primary: Anti-FLVCR (SL12344R) at 1/1000 dilution

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

Predicted band size: 60 kD

Observed band size: 60 kD



Sample:

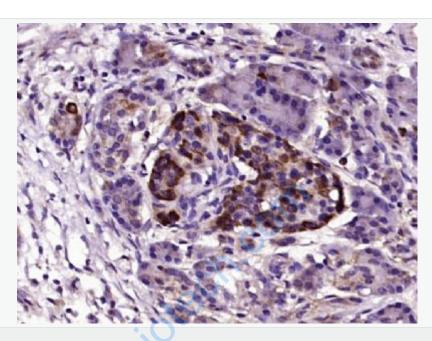
JEG3(Human) Cell Lysate at 30 ug

Primary: Anti-FLVCR (SL12344R) at 1/1000 dilution

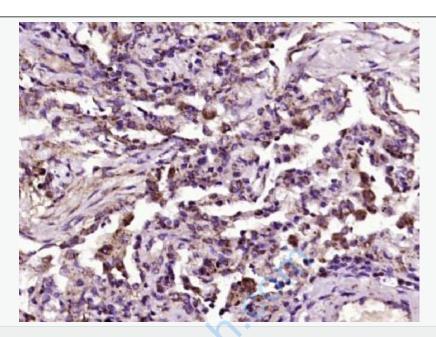
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 60 kD

Observed band size: 60 kD



Paraformaldehyde-fixed, paraffin embedded (human Pancreatic cancer ); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (FLVCR) Polyclonal Antibody, Unconjugated (SL12344R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human lung carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (FLVCR) Polyclonal Antibody, Unconjugated (SL12344R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.