



monocytes and lymphocytes. The expression of CMKLR1 on pDC is down-regulated after activation. Chemerin is a natural ligand of CMKLR1. The interaction of CMKLR1 with Chemerin induces pDC activation. It has been shown that CMKLR1 is a coreceptor for several strains of SIV and HIV-1. CMKLR1 is a marker for distinguishing pDCs and mDCs.

**Function:**

Receptor for the chemoattractant adipokine chemerin/RARRES2 and for the omega-3 fatty acid resolvin E1. Interaction with RARRES2 induces activation of intracellular signaling molecules, such as ERK1/2, MAPK14/P38MAPK and PI3K leading to multifunctional effects, like, reduction of inflammation and enhancing of adipogenesis and angiogenesis. Resolvin E1 down-regulates cytokine production in macrophages and the activation of MAPK1/3 (ERK1/2) and NF-kappa-B. Acts as a coreceptor for several SIV strains (SIVMAC239, SIVMACL7E-FR and SIVSM62A), as well as a primary HIV-1 strain (92UG024).

**Subcellular Location:**

Cell membrane.

**Tissue Specificity:**

Prominently expressed in developing osseous and cartilaginous tissue. Also found in adult parathyroid gland. Prominently expressed in developing osseous and cartilaginous tissue. Also found in adult parathyroid gland, in cardiovascular system, brain, kidney, gastrointestinal tissues and myeloid tissues. Expressed in thymus, associated with hematopoietic and immune function including, spleen, thymus, appendix, lymph node, fetal liver. Among leukocyte populations abundant expression in monocyte-derived macrophage cells (DCs). High expression in blood monocytes and low levels in polymorphonuclear cells and endothelial cells.

**Similarity:**

Belongs to the G-protein coupled receptor 1 family.

**SWISS:**

Q99788

**Gene ID:**

1240

**Database links:**

[Entrez Gene: 1240](#) Human

[Entrez Gene: 14747](#) Mouse

[Entrez Gene: 60669](#) Rat

[Omim: 602351](#) Human

[SwissProt: Q99788](#) Human

[SwissProt: P97468](#) Mouse

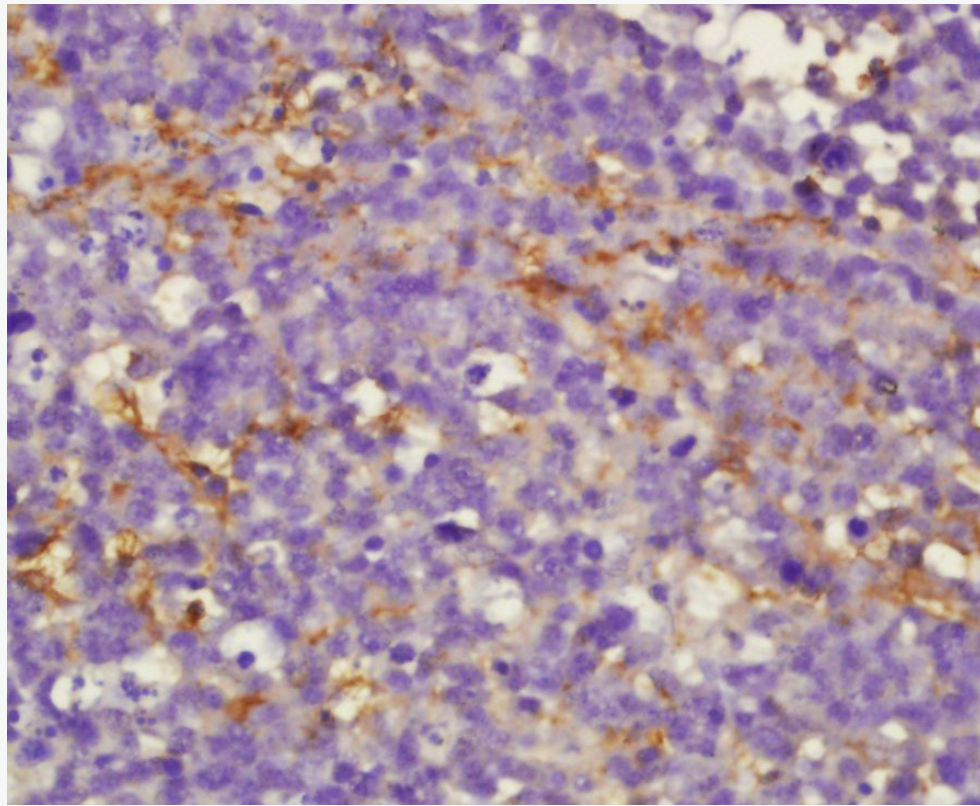
[SwissProt: O35786](#) Rat

[Unigene: 197143](#) Human

[Unigene: 5196](#) Mouse

[Unigene: 44465](#)Rat

**Product  
Picture**



Tissue/cell: human glioma tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

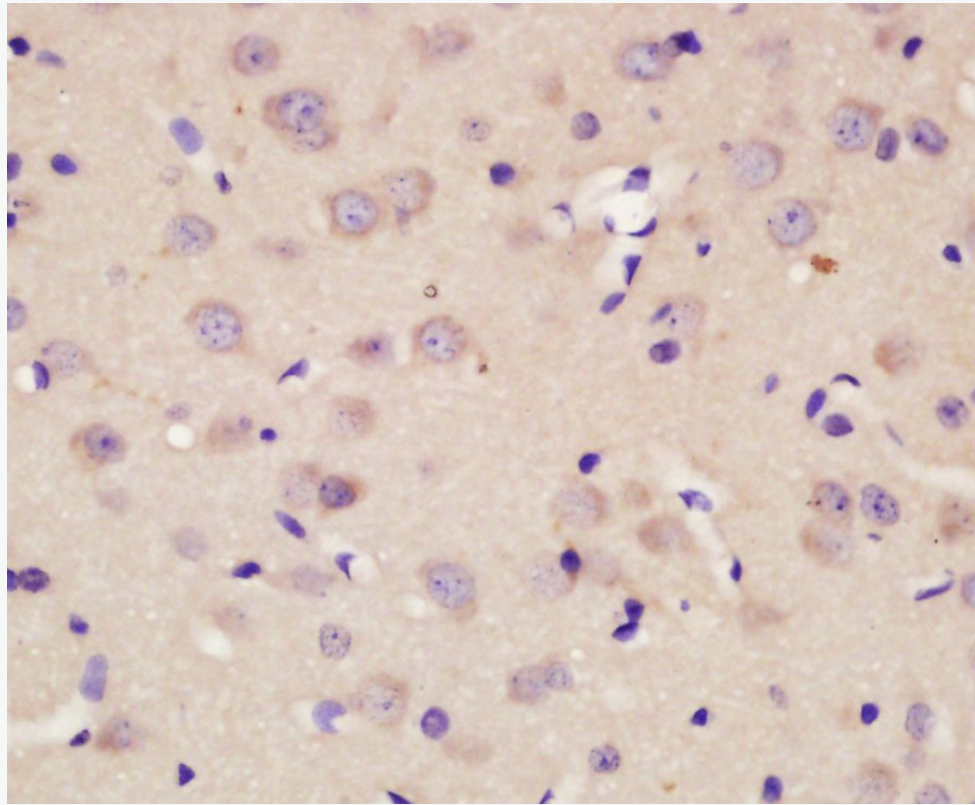
Antigen retrieval: citrate buffer ( Human,Mouse(predicted:Dog,Sheep,Rat)1M, pH 6.0 ), Boiled

Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal

37°C for 20 min;

Incubation: Anti-CMKLR1 Polyclonal Antibody, Unconjugated(SL10185R) 1:200, overnight

conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

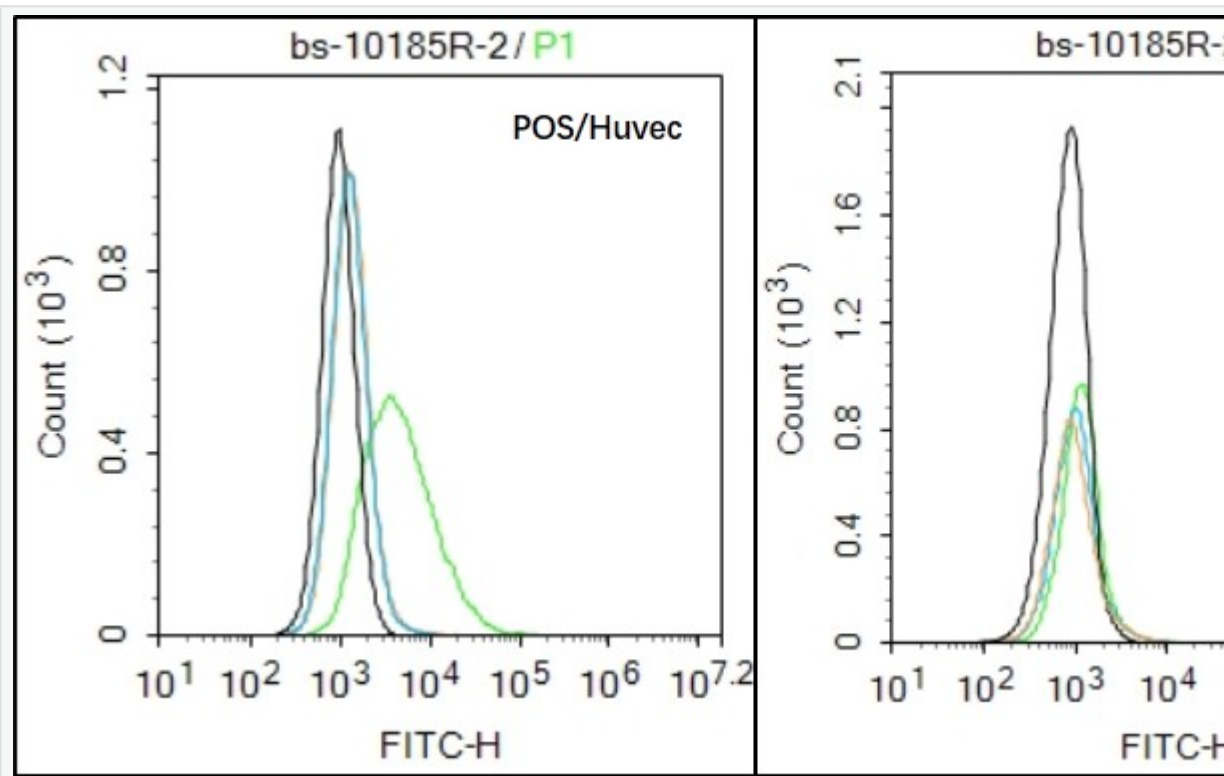
Antigen retrieval: citrate buffer ( Human,Mouse(predicted:Dog,Sheep,Rat)1M, pH 6.0 ), Boiled

Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal

37°C for 20 min;

Incubation: Anti-CMKLR1 Polyclonal Antibody, Unconjugated(SL10185R) 1:200, overnight

conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Black line : Positive blank control HUVEC); Negative blank control (A431 )

Green line : Primary Antibody (Rabbit Anti-CMKLR1 antibody (SL10185R) )

Orange line: Isotype Control Antibody (Rabbit IgG) .

Blue line : Secondary Antibody (Goat anti-rabbit IgG-AF488)

HUVEC ( Positive ) and A431(Negative control ) cells (black) were incubated in 5% BSA bl at room temperature. Cells were then stained with CMKLR1 Antibody(SL10185R)at 1:50 dilu and incubated for 30 min at room temperature, washed twice with 2% BSA in PBS, followed antibody(blue) incubation for 40 min at room temperature. Acquisitions of 20,000 events were stained with primary antibody (green), and isotype control (orange).