10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

CMKLR1 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP50620

Product Information

Application	WB
Primary Accession	Q99788
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	polyclonal
Calculated MW	42322

Additional Information

Gene ID	1240
Other Names	Chemokine-like receptor 1, G-protein coupled receptor ChemR23, G-protein coupled receptor DEZ, CMKLR1, CHEMR23, DEZ
Dilution	WB~~ 1:1000
Format	Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.
Storage Conditions	-20℃

Protein Information

Name	CMKLR1 (HGNC:2121)
Synonyms	CHEMR23, DEZ
Function	Receptor for the chemoattractant adipokine chemerin/RARRES2 and for the omega-3 fatty acid derived molecule resolvin E1. Interaction with RARRES2 initiates activation of G proteins G(i)/G(o) and beta-arrestin pathways inducing cellular responses via second messenger pathways such as intracellular calcium mobilization, phosphorylation of MAP kinases MAPK1/MAPK3 (ERK1/2), TYRO3, MAPK14/P38MAPK and PI3K leading to multifunctional effects, like reduction of immune responses, enhancing of adipogenesis and angionesis (PubMed:27716822). Resolvin E1 down-regulates cytokine production in macrophages by reducing the activation of MAPK1/3 (ERK1/2) and NF- kappa-B. Positively regulates adipogenesis and adipocyte metabolism.
Cellular Location	Cell membrane; Multi-pass membrane protein. Note=Internalizes efficiently in response to RARRES2.

Tissue Location	Prominently expressed in developing osseous and cartilaginous tissue. Also found in adult parathyroid glands. Expressed in cardiovascular system, brain, kidney, gastrointestinal tissues and myeloid tissues. Expressed in a broad array of tissues associated with hematopoietic and immune function including, spleen, thymus, appendix, lymph node, bone marrow and fetal liver. Among leukocyte populations abundant expression in monocyte-derived macrophage and immature dendritic cells (DCs). High expression in blood monocytes and low levels in polymorphonuclear cells and T-cells. Expressed on endothelial cells. Highly expressed in differentiating adipocytes

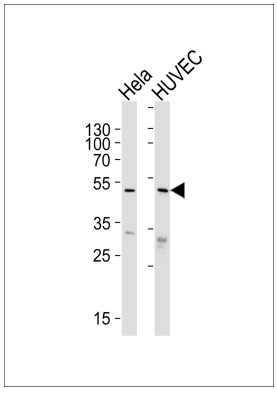
Background

Receptor for the chemoattractant adipokine chemerin/RARRES2 and for the omega-3 fatty acid derived molecule resolvin E1. Interaction with RARRES2 induces activation of intracellular signaling molecules, such as SKY, MAPK1/3 (ERK1/2), MAPK14/P38MAPK and PI3K leading to multifunctional effects, like, reduction of immune responses, enhancing of adipogenesis and angionesis. Resolvin E1 down-regulates cytokine production in macrophages by reducing the activation of MAPK1/3 (ERK1/2) and NF- kappa-B. Positively regulates adipogenesis and adipocyte metabolism. Acts as a coreceptor for several SIV strains (SIVMAC316, SIVMAC239, SIVMACL7E-FR and SIVSM62A), as well as a primary HIV-1 strain (92UG024-2).

References

Methner A.,et al.Biochem. Biophys. Res. Commun. 233:336-342(1997).
Samson M.,et al.Eur. J. Immunol. 28:1689-1700(1998).
Suwa M.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
King M.M.,et al.Submitted (DEC-2003) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images



Western blot analysis of lysates from Hela,HUVEC cell line (from left to right),using CMKLR1 Antibody(AP50620). AP50620 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody.Lysates at 35ug per lane.

Citations

- Electronegative low-density lipoprotein of patients with metabolic syndrome induces pathogenesis of aorta through disruption of the stimulated by retinoic acid 6 cascade