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chemerin Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54258

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q99969
Reactivity	Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	18618
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from rabbit chemerin
Epitope Specificity	101-163/163
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Secreted (Potential).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a secreted chemotactic protein that initiates chemotaxis via the ChemR23 G protein-coupled seven-transmembrane domain ligand. Expression of this gene is upregulated by the synthetic retinoid tazarotene and occurs in a wide variety of tissues. The active protein has several roles, including that as an adipokine, and is truncated on both termini from the proprotein. [provided by RefSeq, Dec 2008].

Additional Information

Gene ID	5919
Other Names	Retinoic acid receptor responder protein 2, Chemerin, RAR-responsive protein TIG2, Tazarotene-induced gene 2 protein, RARRES2, TIG2
Target/Specificity	Highly expressed in skin (basal and suprabasal layers of the epidermis, hair follicles and endothelial cells). Also found in pancreas, liver, spleen, prostate, ovary, small intestine and colon.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	RARRES2
Synonyms	TIG2
Function	Adipocyte-secreted protein (adipokine) that regulates adipogenesis, metabolism and inflammation through activation of the chemokine-like receptor 1 (CMKLR1). Also acts as a ligand for CMKLR2. Can also bind to C-C chemokine receptor-like 2 (CCRL2), but with a lower affinity than it does to CMKLR1 or CMKLR2 (PubMed:27716822). Positively regulates adipocyte differentiation, modulates the expression of adipocyte genes involved in lipid and glucose metabolism and might play a role in angiogenesis, a process essential for the expansion of white adipose tissue. Also acts as a pro-inflammatory adipokine, causing an increase in secretion of pro-inflammatory and prodiabetic adipokines, which further impair adipose tissue metabolic function and have negative systemic effects including impaired insulin sensitivity, altered glucose and lipid metabolism, and a decrease in vascular function in other tissues. Can have both pro- and anti-inflammatory properties depending on the modality of enzymatic cleavage by different classes of proteases. Acts as a chemotactic factor for leukocyte populations expressing CMKLR1, particularly immature plasmacytoid dendritic cells, but also immature myeloid DCs, macrophages and natural killer cells. Exerts an anti-inflammatory role by preventing TNF/TNFA-induced VCAM1 expression and monocytes adhesion in vascular endothelial cells. The effect is mediated via inhibiting activation of NF-kappa-B and CRK/p38 through stimulation of AKT1/NOS3 signaling and nitric oxide production. Its dual role in inflammation and metabolism might provide a link between chronic inflammation and obesity, as well as obesity-related disorders such as type 2 diabetes and cardiovascular disease. Exhibits an antimicrobial function in the skin.
Cellular Location	Secreted {ECO:0000250|UniProtKB:Q9DD06}.
Tissue Location	Expressed at the highest levels in placenta, liver, and white adipose tissue (WAT), and to a lesser extent in many other tissues such as lung, brown adipose tissue, heart, ovary, kidney, skeletal muscle and pancreas. Within WAT, expression is enriched in adipocytes as compared to the stromal vascular fraction. Expression and secretion increases dramatically with adipogenesis. Highly expressed in skin (basal and suprabasal layers of the epidermis, hair follicles and endothelial cells). Expression is elevated in numerous metabolic and inflammatory diseases including psoriasis, obesity, type 2 diabetes, metabolic syndrome and cardiovascular disease