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

Anti-TIG2 Antibody

Catalog # AP51981

Product Information

Application	WB
Primary Accession	Q99969
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	18618

Additional Information

Gene ID	5919
Other Names	TIG2; Retinoic acid receptor responder protein 2; Chemerin; RAR-responsive protein TIG2; Tazarotene-induced gene 2 protein
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human TIG2. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

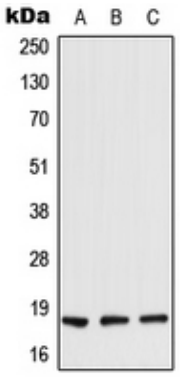
Name	RARRES2
Synonyms	TIG2
Function	Adipocyte-secreted protein (adipokine) that regulates adipogenesis, metabolism and inflammation through activation of the chemokine-like receptor 1 (CMKLR1). Also acts as a ligand for CMKLR2. Can also bind to C-C chemokine receptor-like 2 (CCRL2), but with a lower 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

References

Nagpal S.,et al.J. Invest. Dermatol. 109:91-95(1997).
Yokoyama-Kobayashi M.,et al.Gene 228:161-167(1999).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Ebert L.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Hillier L.W.,et al.Nature 424:157-164(2003).

Images



Western blot analysis of TIG2 expression in HeLa (A), Raw264.7 (B), rat liver (C) whole cell lysates. (Predicted band size: 18 kD; Observed band size: 18 kD)

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.