

**RARRES2 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP22233c**

**Specification**

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**RARRES2 Antibody (Center) - Product Information**

Application	WB, FC,E
Primary Accession	<a href="#">Q99969</a>
Reactivity	Human
Host	Rabbit
Clonality	polyclonal
Isotype	Rabbit IgG
Calculated MW	18618

**RARRES2 Antibody (Center) - 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**

This RARRES2 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 89-133 amino acids from the Central region of human RARRES2.

**Dilution**

WB~~1:2000  
FC~~1:25  
E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

RARRES2 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**RARRES2 Antibody (Center) - 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**

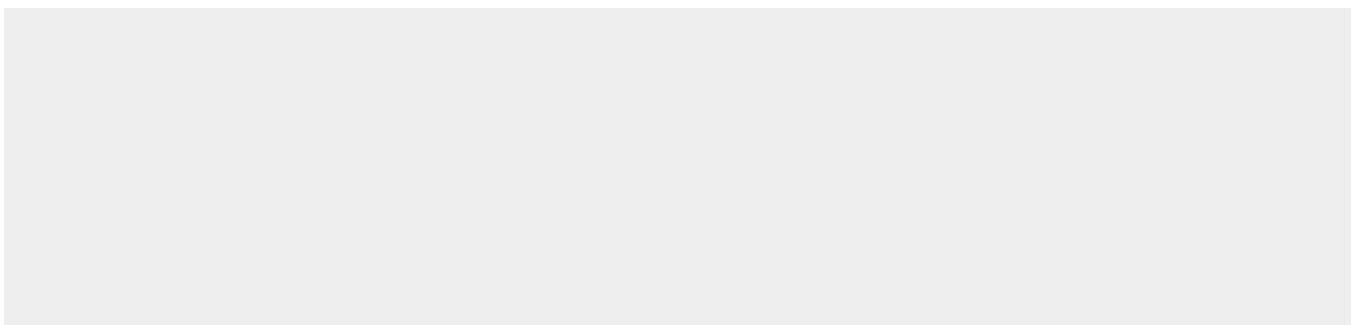
Expressed at the highest levels in placenta, liver, and white adipose tissue (WAT), and to a lesser extent in many other tissues such as lung, brown adipose tissue, heart, ovary, kidney, skeletal muscle and pancreas. Within WAT, expression is enriched in adipocytes as compared to the stromal vascular 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

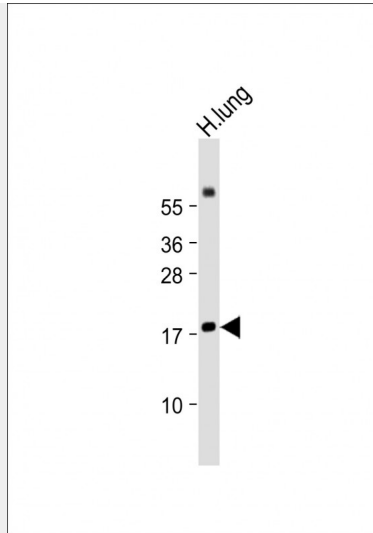
### **RARRES2 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

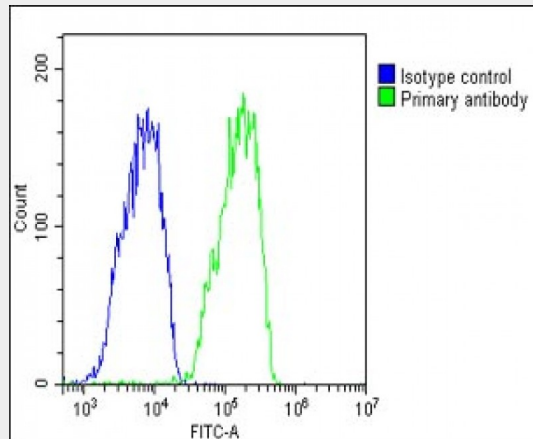
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### **RARRES2 Antibody (Center) - Images**





Anti-RARRES2 Antibody (Center) at 1:2000 dilution + Human lung lysate Lysates/proteins at 20  $\mu$ g per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 19 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing HepG2 cells stained with AP22233c (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP22233c, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (1583138) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1  $\mu$ g/1x10<sup>6</sup> cells) used under the same conditions. Acquisition of >10,000 events was performed.

### RARRES2 Antibody (Center) - Background

Adipocyte-secreted protein (adipokine) that regulates adipogenesis, metabolism and inflammation through activation of the chemokine-like receptor 1 (CMKLR1). Its other ligands include G protein-coupled receptor 1 (GPR1) and chemokine receptor-like 2 (CCRL2). 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 proinflammatory adipokine, causing an increase in secretion of proinflammatory 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

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#### **RARRES2 Antibody (Center) - References**

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Yokoyama-Kobayashi M.,et al.Gene 228:161-167(1999).  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
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Hillier L.W.,et al.Nature 424:157-164(2003).