

**SUCNR1 / GPR91 Antibody (Cytoplasmic Domain)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS10514****Specification**

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**SUCNR1 / GPR91 Antibody (Cytoplasmic Domain) - Product Information**

Application	IHC
Primary Accession	<a href="#">Q9BXA5</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	39kDa KDa

**SUCNR1 / GPR91 Antibody (Cytoplasmic Domain) - Additional Information****Gene ID** 56670**Other Names**

Succinate receptor 1, G-protein coupled receptor 91, P2Y purinoceptor 1-like, SUCNR1, GPR91

**Target/Specificity**

Human GPR91. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

**Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

**Precautions**

SUCNR1 / GPR91 Antibody (Cytoplasmic Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

**SUCNR1 / GPR91 Antibody (Cytoplasmic Domain) - Protein Information****Name** SUCNR1 ([HGNC:4542](#))**Synonyms** GPR91**Function**

G protein-coupled receptor for succinate able to mediate signaling through Gq/GNAQ or Gi/GNAI second messengers depending on the cell type and the processes regulated (By similarity) (PubMed:<a href="http://www.uniprot.org/citations/15141213" target="\_blank">15141213</a>, PubMed:<a href="http://www.uniprot.org/citations/34133934" target="\_blank">34133934</a>, PubMed:<a href="http://www.uniprot.org/citations/23770096" target="\_blank">23770096</a>). Succinate-SUCNR1 signaling serves as a link between metabolic stress, inflammation and energy homeostasis (PubMed:<a href="http://www.uniprot.org/citations/18820681" target="\_blank">18820681</a>, PubMed:<a href="http://www.uniprot.org/citations/34133934" target="\_blank">34133934</a>). In macrophages, plays a range of immune-regulatory roles. During inflammation, succinate-SUCNR1 signaling may act as an anti-inflammatory mediator or

boost inflammation depending on the inflammatory status of cells (By similarity). Hyperpolarizes M2 macrophages versus M1 phenotype through Gq signaling by regulating the transcription of genes involved in immune function (PubMed:<a href="http://www.uniprot.org/citations/34133934" target="\_blank">34133934</a>). In activated M1 macrophages, plays a pro-inflammatory role in response to LPS (By similarity). Expressed in dendritic cells, where it is involved in the sensing of immunological danger and enhances immunity. Mediates succinate triggered intracellular calcium mobilization, induces migratory responses and acts in synergy with Toll-like receptor ligands for the production of proinflammatory cytokines as well as an enhancement of antigen-specific activation of helper T cells (PubMed:<a href="http://www.uniprot.org/citations/18820681" target="\_blank">18820681</a>). In the small intestine, mediates the activation of tuft cells by dietary succinate and triggers type 2 immunity (By similarity). In adipocytes, plays an important role in the control of energy metabolism. In response to succinate, controls leptin expression in an AMPK-JNK-CEBPA-dependent as well as circadian clock-regulated manner (By similarity). In muscle tissue, is expressed in non-muscle cells and coordinates muscle remodeling in response to the succinate produced during exercise training in a paracrine manner (By similarity). In retina, acts as a mediator of vessel growth during retinal development. In response to succinate, regulates the production of angiogenic factors, including VEGF, by retinal ganglion neurons (By similarity).

**Cellular Location**

Cell membrane; Multi-pass membrane protein

**Tissue Location**

Expressed specifically in kidney (PubMed:11273702). Highly expressed in immature dendritic cells, expression rapidly downregulates after maturation. Also expressed in macrophages (PubMed:18820681).

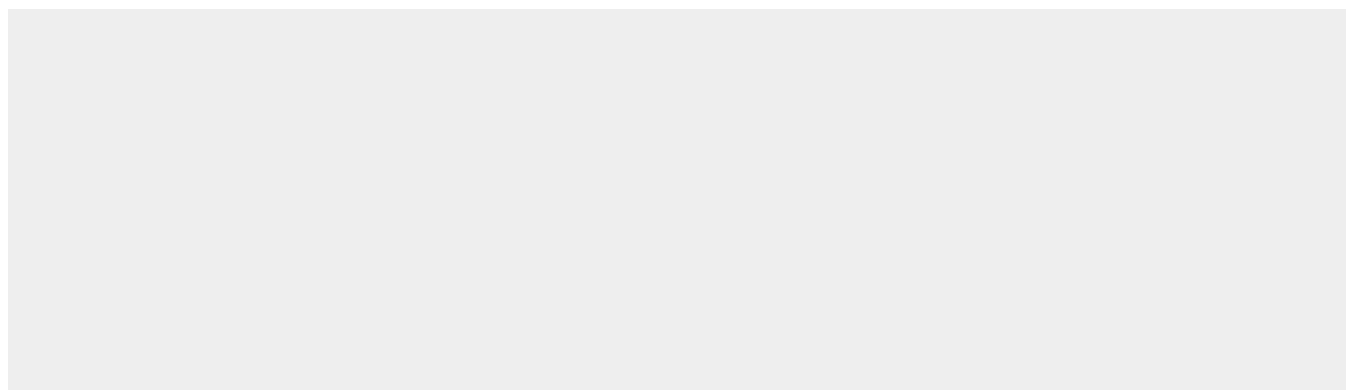
**Volume**

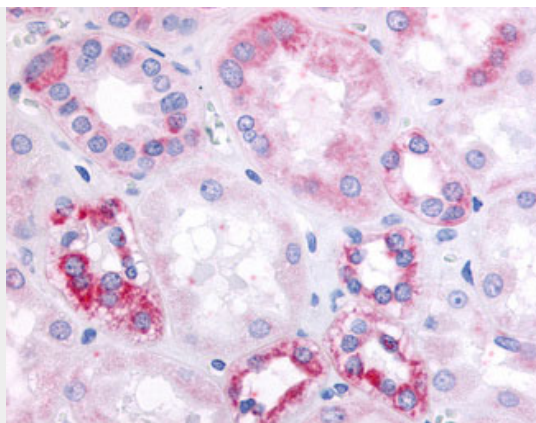
50 µl

**SUCNR1 / GPR91 Antibody (Cytoplasmic Domain) - 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](#)

**SUCNR1 / GPR91 Antibody (Cytoplasmic Domain) - Images**



Anti-GPR91 antibody ALS10514 IHC of human kidney, renal tubular epithelium in cortex.

### **SUCNR1 / GPR91 Antibody (Cytoplasmic Domain) - Background**

Receptor for succinate.

### **SUCNR1 / GPR91 Antibody (Cytoplasmic Domain) - References**

- Wittenberger T.,et al.J. Mol. Biol. 307:799-813(2001).  
Zhang W.,et al.Submitted (MAR-2000) to the EMBL/GenBank/DDBJ databases.  
Kaighin V.A.,et al.Submitted (DEC-2007) to the EMBL/GenBank/DDBJ databases.  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Muzny D.M.,et al.Nature 440:1194-1198(2006).