**Basic Information**

- **Catalog Number:** 15168-1-AP
- **Size:** 150μl, Concentration: 700μg/ml by Nanodrop
- **Source:** Rabbit
- **Isotype:** IgG
- **Immunogen Catalog Number:** AG7351
- **GenBank Accession Number:** BC004899
- **GeneID (NCBI):** 10280
- **Full Name:** sigma non-opioid intracellular receptor 1
- **Calculated MW:** 25 kDa
- **Observed MW:** 27 kDa
- **Purification Method:** Antigen affinity purification
- **Recommended Dilutions:**
  - WB: 1:1000-1:8000
  - IHC: 1:250-1:1000

**Applications**

- **Tested Applications:** IHC, WB
- **Cited Applications:** CoIP, IF, IHC, WB
- **Species Specificity:** human, mouse, rat
- **Cited Species:** human, mouse, rat, zebrafish

**Note-IHC:** suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

**Positive Controls:**
- **WB:** COLO 320 cells, mouse kidney tissue, mouse colon tissue, rat colon tissue
- **IHC:** human liver cancer tissue, rat brain tissue

**Background Information**

SIGMAR1, also named as OPRS1, SRBP, SIG-1R and AAG8, belongs to the ERG2 family. It is an endoplasmic reticulum chaperone that binds a wide variety of ligands, including neurosteroids, psychostimulants, and dextrobenzomorphans. SIGMAR1 is ubiquitously expressed, and is enriched in motor neurons of the brain and spinal cord. It plays a role in calcium signaling through modulation together with ANK2 of the ITP3R-dependent calcium efflux at the endoplasmic reticulum. SIGMAR1 plays a role in several other cell functions including proliferation, survival and death. SDS-PAGE and Western blot analysis showed that SIGMAR1 has an apparent molecular mass of 28 kDa. SIGMAR1 has 5 isoforms with MW 21-27kDa and 12kDa.

**Notable Publications**

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<th>Author</th>
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<tbody>
<tr>
<td>Danyang Liu</td>
<td>34582837</td>
<td>Exp Neurol</td>
<td>WB, IF</td>
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<td>Ema Onode</td>
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<td>Zheng Wang</td>
<td>36204818</td>
<td>Neural Regen Res</td>
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**Storage**

- **Store at -20°C. Stable for one year after shipment.**
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20°C storage**

*** 20ul sizes contain 0.1% BSA

For technical support and original validation data for this product please contact:

T: 1(888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

E: proteintech@ptglab.com

W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
Various lysates were subjected to SDS PAGE followed by western blot with 15168-1-AP (SIGMAR1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 15168-1-AP (SIGMAR1 antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 15168-1-AP (SIGMAR1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).