

**OPN5 Antibody (Transmembrane Domain)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS10527**

**Specification**

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**OPN5 Antibody (Transmembrane Domain) - Product Information**

Application	IHC
Primary Accession	<a href="#">Q6U736</a>
Reactivity	Human, Mouse, Rabbit, Monkey, Horse, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40kDa KDa

**OPN5 Antibody (Transmembrane Domain) - Additional Information**

**Gene ID** 221391

**Other Names**

Opsin-5, G-protein coupled receptor 136, G-protein coupled receptor PGR12, Neuropsin, Transmembrane protein 13, OPN5, GPR136, PGR12, TMEM13

**Target/Specificity**

Human OPN5. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

**Reconstitution & Storage**

Long term: -70°C; Short term: +4°C

**Precautions**

OPN5 Antibody (Transmembrane Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

**OPN5 Antibody (Transmembrane Domain) - Protein Information**

**Name** OPN5

**Synonyms** GPR136, PGR12, TMEM13

**Function**

G-protein coupled receptor which selectively activates G(i) type G proteins via ultraviolet A (UVA) light-mediated activation in the retina (By similarity). Preferentially binds the chromophore 11-cis retinal and is a bistable protein that displays emission peaks at 380 nm (UVA light) and 470 nm (blue light) (PubMed:<a href="http://www.uniprot.org/citations/22043319" target="\_blank">22043319</a>). Required for the light-response in the inner plexiform layer, and contributes to the regulation of the light-response in the nerve fiber layer, via phosphorylated DAT/SLC6A3 dopamine uptake (By similarity). Involved in local corneal and retinal circadian rhythm photoentrainment via modulation of the UVA light-induced phase-shift of the retina clock

(By similarity). Acts as a circadian photoreceptor in the outer ear, via modulation of circadian clock-gene expression in response to violet light during the light-to-dark transition phase and night phase of the circadian cycle (By similarity). Required in the retina to negatively regulate hyaloid vessel regression during postnatal development via light-dependent OPN5-SLC32A1-DRD2-VEGFR2 signaling (By similarity). Involved in the light-dependent regulation of retina and vitreous compartment dopamine levels (By similarity).

#### **Cellular Location**

Cell membrane; Multi-pass membrane protein

#### **Tissue Location**

Detected in brain and retina and cell lines derived from neural retina.

#### **Volume**

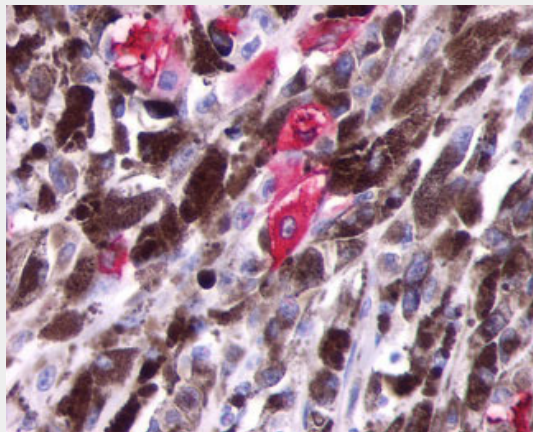
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### **OPN5 Antibody (Transmembrane Domain) - Protocols**

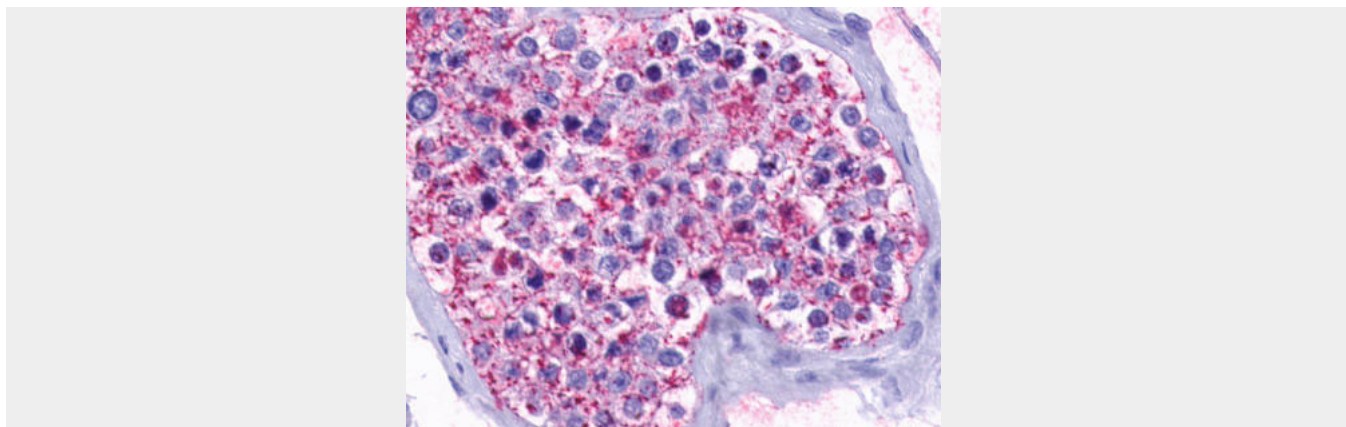
Provided below are standard protocols that you may find useful for product applications.

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

### **OPN5 Antibody (Transmembrane Domain) - Images**



Anti-OPN5 antibody IHC of human Skin, Melanoma.



Anti-OPN5 antibody ALS10527 IHC of human testis.

### **OPN5 Antibody (Transmembrane Domain) - References**

- Tarttelin E.E.,et al.FEBS Lett. 554:410-416(2003).  
Fredriksson R.,et al.FEBS Lett. 554:381-388(2003).  
Vassilatis D.K.,et al.Proc. Natl. Acad. Sci. U.S.A. 100:4903-4908(2003).  
Mungall A.J.,et al.Nature 425:805-811(2003).