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OPN5 Antibody (Transmembrane Domain)

Rabbit Polyclonal Antibody
Catalog # ALS10527

Specification

OPN5 Antibody (Transmembrane Domain) - Product Information

Application	**IHC**
Primary Accession	Q6U736
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:22043319). 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.

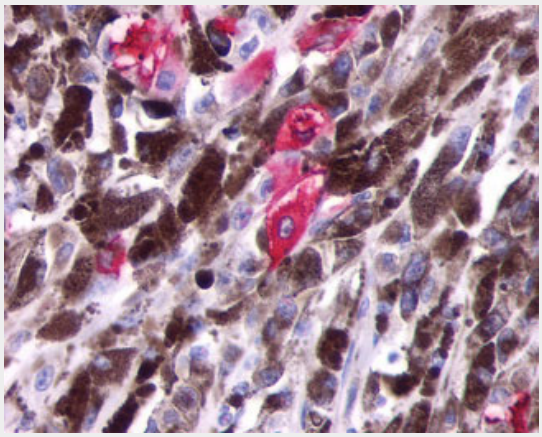
Volume
50 µl

OPN5 Antibody (Transmembrane Domain) - Protocols

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

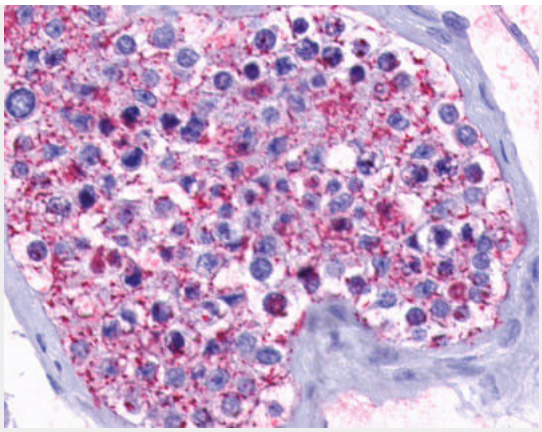
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

OPN5 Antibody (Transmembrane Domain) - Images



Anti-OPN5 antibody IHC of human Skin, Melanoma.

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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).