

## Academic Papers

1. Visual Responses of Photoreceptor-Degenerated Rats Expressing Two Different Types of Channelrhodopsin Genes. Sato M, Sugano E, Tabata K, Sannohe K, Watanabe Y, Ozaki T, Tamai M, Tomita H\*. *Sci Rep*, 23(7),41210, 2017  
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3. Restoration of the majority of the visual spectrum by using modified Volvox channelrhodopsin-1. Tomita H, Sugano E, Murayama N, Ozaki T, Nishiyama F, Tabata K, Takahashi M, Saito T, Tamai M. *Mol Ther*, 22(8): 1434-40. 2014  
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2. Tomita H, Sugano E, Isago H, Tamai M. Channelrhodopsins provide a breakthrough insight into strategies for curing blindness. J Genet, 88(4): 409-15. 2009

### **Reviews**

1. Sugano E, Tomita H. Establishment of gene therapy using Channelrhodopsin-2 to treat blindness. Optogenetics: Light-Sensing Proteins and their Applications. H. Yawo, H. Kandori and A. Koizumi, Springer Japan: 341-352. 2015.
2. Tomita H, Sugano E, Isago H, Murayama N, Tamai M. Gene Therapy for Retinitis pigmentosa. Gene Therapy - Tools and Potential Applications. F. Martin, INTECH: 493-510. 2013.

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1. Tomita H, Sugano E, Tamai M. Session: Update on gene therapy; Restoration of the majority of the visual spectrum by using modified Volvox channelrhodopsin-1. 19th Retina International World Congress, RIWC 2016 Summay Book: 27. (Taipei, Taiwan), 2016.07.08-10
2. Tomita H, Sugano E, Tamai M. Use of optogenetic technologies to retinal gene therapy. International Symposium on Hybrid Organs of the future. (Osaka, Japan), 2015.03.03
3. Tomita H, Sugano E, Murayama N, Tabata K, Takahashi M, Saito T, Tamai M. Gene Therapy for Restoring Vision. The 37th Annual Meeting of the Japan Neuroscience Society. (Yokohama), 2014.09.12
4. Tomita H, Sugano E, Murayama N, Tabata K, Takahashi M, Saito T, Tamai M. Resoration of the majority of the visual spectrum in RCS rats using AAV-mediated modified volvox channelrhodopsin-1 gene transfer. International Society for Eye Research. (San Francisco,CA), 2014.07.24
5. Tomita H, Sugano E, Murayama N, Tabata K, Takahashi M, Saito T, Tamai M. Channelrhodopsin-2: Application of optogenetic technologies to vision. World Ophthalmology Congress 2014 JRPS Session: International Forum for Chorioretinal Dystrophy Part 2. (Tokyo), 2014.04.05
6. Tomita H, Sugano E, Isago H, Murayama N, Tamai M. Visual properties of genetically blind rats transduced with channelrhodopsin-2 gene. The Fourth Global Chinese Ophthalmic Conference, The 16th Congress of Chinese Ophthalmological Society (Guangzhou, China), 2011.09.08-11

### **Patent**

US 8,754,048B2, Title: Light-receiving channel rhodopsin having improved expression efficiency.

Date of Patent Jun.17, 2014

EP2465931B1, Title: Light-receiving channel rhodopsin having improved expression efficiency.

Date of Patent Dec.24, 2014