

Production of Otitis Media Mucin and Mucous Cell Metaplasia

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Abstract

Mucous cell metaplasia, which causes mucous hyper secretion and the condition to persist, is a major problem in otitis media. The molecular pathways behind mucous cell metaplasia in otitis media are not well understood, yet. Atonal homolog 1 (Atoh1), a basic helix-loop-helix (bHLH) transcription factor, has been demonstrated to be $\frac{1}{8}\frac{1}{8}\frac{1}{8}\frac{1}{6}\frac{1$

Keywords: (1, 1, 1) (1, 1, 1) (1, 1, 1) (1, 1, 1) (1, 1, 1) (1, 1, 1) (1, 1, 1) (1, 1, 1) (1,

Introduction

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Received: 03-Aug-2022, Manuscript No: ocr-22-72287, Editor Assigned: 06-Aug-2022, pre QC No: ocr-22-72287 (PQ), Reviewed: 19-Aug-2022, QC No: ocr-22-72287, Revised: 25-Aug-2022, Manuscript No: ocr-22-72287 (R), Published: 31-Aug-2022, DOI: 10.4172/2161-119X.1000478

Citation: Murray A (2022) Production of Otitis Media Mucin and Mucous Cell Metaplasia. Otolaryngol (Sunnyvale) 12: 478.

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Materials and Methods

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Discussion

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Conclusions



Acknowledgement

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Con ict of Interest

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References

 Lin J, Tsuboi Y, Rimell F (2003) Expression of mucins in mucoid otitis media. Journal of the Association for Research in Otolaryngology 4: 384-393.

- 2. Rose MC (1992) Mucins structure function and role in pulmonary diseases. American Journal of Physiology 263: 413-429.
- Linden SK, Sutton P, Karlsson NG, Korolik V, McGuckin MA (2008) Mucins in the mucosal barrier to infection. Mucosal Immunology 1: 183-197.
- Oá^àà) \ÅÖÜÅTä∥•ÅÖŠÄP ÄRÜÄÇFJÏJDÅThe microbiology of serous and mucoid otitis media. Pediatrics 63: 915-919.
- Lin J, Tsuboi Y, Pan W, Giebink GS, Adams GL, et al. (2002) Analysis by cDNA microarrays of altered gene expression in middle ears of rats following pneumococcal infection. International Journal of Pediatric Otorhinolaryngology 65: 203-211.

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