

# US/VOT-E36 Cell Line

**Catalogue number:** 153625

**Sub-type:** Continuous

**Images:**

## Contributor

**Inventor:** Matthew C Holley

**Institute:** University of Sheffield

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** US/VOT-E36 Cell Line

**Alternate name:** US/VOT-E36; Ventral Otocyst-Epithelial cell line number 36; VOT-E36; University of Sheffield/Ventral OTocyst-Epithelial 36

**Class:**

**Conjugate:**

**Description:** US/VOT-E36 cells represent epithelial progenitors with potential to differentiate into sensory and nonsensory epithelial cells. The conditionally immortal cell line was established from the ventral otocyst of the Immortomouse at embryonic day 10.5 (plug in mouse designated E0.5 and birth at E18-19). At this stage the sensory epithelia have not differentiated, and the epithelium is competent to form most of the cells within the cochlear duct, including primary sensory neurons. VOT-E36 cell...

**Purpose:**

**Parental cell:**

**Organism:** Mouse

**Tissue:** Embryonic

**Model:** Transgenic

**Gender:**

**Isotype:**

**Reactivity:**

**Selectivity:**

**Host:**

**Immunogen:**

**Immunogen UNIPROT ID:**

**Sequence:**

**Growth properties:** Adherent

**Production details:** Homozygous male Immortomice (originally derived from injected oocytes of

CBA/Ca x C57BL/10 mice) were time-mated with wild-type C57Bl/6 female mice to produce heterozygous offspring. Animals were killed by cervical dislocation, in accordance with UK Home Office regulations. Otcysts were removed from E10 embryos under sterile conditions and then dissected to isolate the ventral region. Further selection of ventral otocyst explants was based on expression of the immortalizing gene (condition...

**Formulation:**

**Recommended controls:**

**Bacterial resistance:**

**Selectable markers:**

**Additional notes:**

## Target details

**Target:** GATA3 (GATA Binding Protein 3)

**Target alternate names:**

**Target background:** Zinc finger transcription factor

**Molecular weight:**

**Ic50:**

## Applications

**Application:** Inner ear development studies; Gene expression and function of inner ear-specific genes studies; In vitro screening for gene activation and promoter analysis; Ototoxicity (prescribed drugs and agents that ameliorate their affects) studies; Studies on function of inherited deafness mutations; Functional analysis of ion channels, receptors and signalling pathways in vitro

**Application notes:**

## Handling

**Format:** Frozen

**Concentration:**

**Passage number:**

**Growth medium:** MEM with 10% FCS, 50 Units/ml y-IFN, L-glutamine

**Temperature:** 33° C

**Atmosphere:**

**Volume:** 1 ml

**Storage medium:** Cytiva HyClone™ FetalClone? II Serum (U.S.) Thermo Fisher

**Storage buffer:**

**Storage conditions:** Liquid Nitrogen

**Shipping conditions:** Dry ice

## Related tools

**Related tools:** US/VOT-N33 Cell Line; GATA3eGFP reporter cell line; UB-UE1 Cell Line; UB-OC2 Cell Line  
UB-OC1 Cell Line

## References

**References:** Hackett et al. 2002. Exp Cell Res. 278(1):19-30. PMID: 12126954; Lawlor et al. 1999. J Neurosci. 19(21):9445-58. PMID: 10531448

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