

TR146 Cell Line

Catalogue number: 151425

Sub-type:

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: TR146 Cell Line

Alternate name: Tr146; TR-146; TR 146

Class:

Conjugate:

Description: Derived from well-differentiated keratinizing squamous cell carcinoma of the buccal mucosa the TR146 cell line represents an in vitro model to study permeability, absorption and metabolism of various enzymatically labile drugs and substances including epithelial-mesenchymal transition (EMT) markers, tight junction proteins and aquaporins. Due to morphological similarities and comparable permeability, excised porcine buccal mucosa has been considered a reasonably good model of human buccal mucosa for drug delivery studies. However, for rapid and efficient screening of drug permeability, a cell line generally holds advantages over in vitro models of excised tissue. Closely resembling normal human buccal epithelium, the cell line functions as a reliable oral mucosa model. TR146 has been characterised for permeability of a number of substances of varying molecular weight and hydrophilicity over a range of pH and osmolality. Activity of aminopeptidase, carboxypeptidase and esterase has also been studied and shown to be comparable with that of human buccal epithelium.

Purpose:

Parental cell:

Organism: Human

Tissue: Buccal mucosa that had infiltrated a lymph node

Model: Tumourigenic line

Gender: Female

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties: Adherent

Production details: The TR146 cell line originates from a human neck metastasis of a buccal carcinoma, derived from neck node (primary tumour sited in buccal mucosa). Well-differentiated. Female patient, 67 years. Previous radiotherapy (6,000 rads) and neck dissection

Formulation:

Recommended controls:

Bacterial resistance:

Selectable markers:

Additional notes: Histology: well-differentiated keratinizing squamous cell carcinoma. Cell type: polygonal

Target details

Target:

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application: Human buccal mucosa modeling; Permeability, absorption and metabolism studies of various substances and enzymatically labile drugs; Drug delivery studies

Application notes: Transport studies involving C-reactive protein; Barrier function assessments using transepithelial electrical resistance and carboxyfluorescein permeability assays; Cytotoxicity studies with antibacterial compounds; Viability and metabolic activity investigations post blue laser light exposure; Candida albicans infection studies; Insulin permeability studies

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium: HAMS F12 + 2mM Glutamine + 10% Foetal Bovine Serum (FBS)

Temperature: 37° C

Atmosphere: 5% CO2

Volume: 1 ml

Storage medium:

Storage buffer:

Storage conditions: Liquid Nitrogen

Shipping conditions: Dry ice

Related tools

Related tools:

References

References: Salinas et al. 2005. J Neurochem. 95(5):1411-20. PMID: 16219033. ; Human spastin has multiple microtubule-related functions.

CancerTools.org