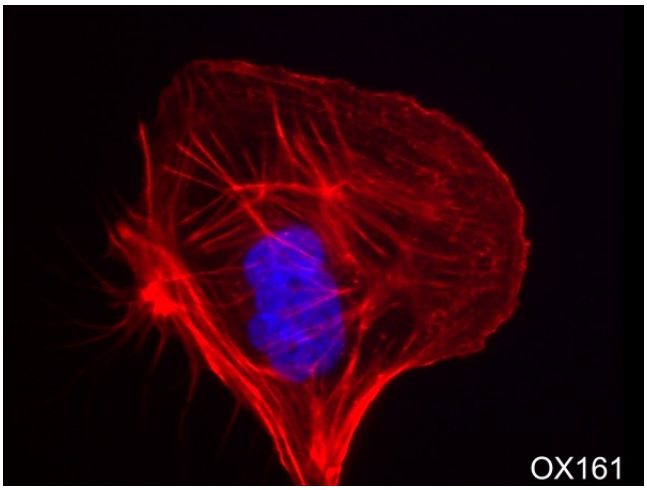
OX161 - ADPKD patient cystic kidney epithelial cell line

A patient-derived cell line for studying the ADPKD kidney cell phenotype



Category
Biological Materials

Authors
Prof Albert Ong

View online

The OX161 cell line is an immortalised human kidney cell line, derived from the tissue of an Autosomal-Dominant Polycystic Kidney Disease (ADPKD) patient with a PKD1 mutation.

Primary cells, isolated from surplus cystic kidney cells obtained at nephrectomy, were cultured and transduced with retroviral vectors containing a temperature-sensitive SV40T antigen and the catalytic subunit of telomerase.

Along with the UCL93 control cell line, these cell lines are useful *in vitro* models to study normal and disease-specific ADPKD phenotypes or pathways.

Ordering

Particular attention should be paid when selecting the licence, and reviewing the associated T&Cs.

Available licences:

- 2 year restricted-use licence: Permitted use of the described cell line for a 2 year term. No cell line modifications are permitted (see licence T&Cs for more info)
- Perpetual licence: Permitted use of the described cell line with no time restrictions. The customer is permitted to produce cell line modifications.

Delivery and checkout questions

A £50 charge is added at checkout to cover packing and shipping costs. The material will be packaged with dry ice and prepared for shipping.

The customer will be required to provide a **courier account code** for which the shipping will be charged to.

The customer is also asked to provide details of their intended use for the material.

For International orders: The University distributes this material internationally in accordance with INCOTERMS Ex Works (EXW) rules. Under these terms, the buyer takes full responsibility for arranging the courier shipment and associated costs, including any customs duties incurred. This includes selecting and organising the courier (as to buyer's preference), providing shipment paperwork (specifically the waybill and a commercial / proforma invoice) as well as instructions on the packaging and labelling of the parcel to the research group, and arranging the collection.

Keywords

Ox161, OX-161, ADPKD, Autosomal Dominant Polycystic Kidney Disease, Kidney Cells, PKD1 mutation, Renal, immortalised, immortalized

Further information

Further information on the research group and providing researcher may be found at:

https://www.sheffield.ac.uk/medicine/people/iicd/albert-cm-ong

Associated journal references

Streets AJ, Newby LJ, O'Hare MJ, Bukanov NO, Ibraghimov-Beskrovnaya O, Ong AC. Functional analysis of PKD1 transgenic lines reveals a direct role for polycystin-1 in mediating cell-cell adhesion. J Am Soc Nephrol. 2003 Jul;14(7):1804-15.

https://doi.org/10.1097/01.ASN.0000076075.49819.9B

E. Parker, L.J. Newby, C.C. Sharpe, S. Rossetti, A.J. Streets, P.C. Harris, M.J. O'Hare, A.C.M. Ong. Hyperproliferation of PKD1 cystic cells is induced by insulin-like growth factor-1 activation of the Ras/Raf signalling system. Kidney International. 2007; 72(2): 157-165.

https://doi.org/10.1038/sj.ki.5002229

Lannoy M, Valluru MK, Chang L, Abdela-Ali F, Peters DJM, Streets AJ, Ong ACM. The positive effect of selective prostaglandin E2 receptor EP2 and EP4 blockade on cystogenesis in vitro is counteracted by increased kidney inflammation in vivo. Kidney Int. 2020 Aug;98(2):404-419. doi:

10.1016/j.kint.2020.02.012. Epub 2020 Mar 6. PMID: 32622526.

https://doi.org/10.1016/j.kint.2020.02.012

Streets AJ, Prosseda PP, Ong AC. Polycystin-1 regulates ARHGAP35-dependent centrosomal RhoA activation and ROCK signaling. JCI Insight. 2020 Aug 20;5(16):e135385.

https://doi.org/10.1172/jci.insight.135385