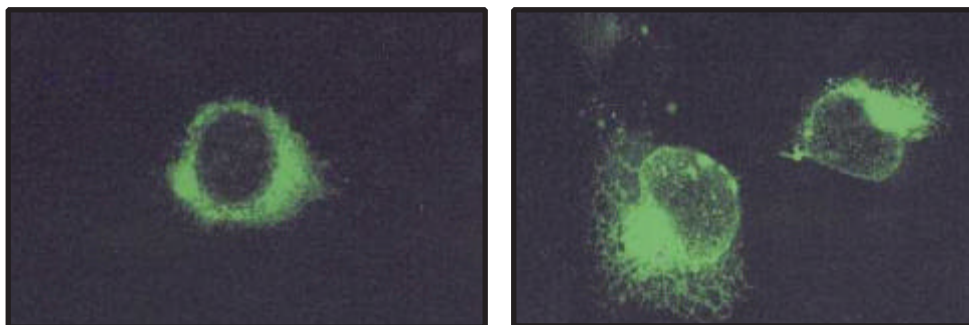


Scotin - a novel target for cancer therapies



Location of expressed GFP-Scotin

University of Dundee researchers have identified and characterised a novel gene inducible by p53. Scotin is a potential target for new cancer therapies and could also form the basis of new therapeutic compounds. A commercial partner is now sought for development of this technology through either research collaboration or licensing.

Background

Mutation of the p53 tumour suppressor protein is the most common genetic aberration known to occur in human cancers. Wild-type p53 protein is involved in several biological functions such as replication, senescence, differentiation and DNA repair, however, the best described biological functions of p53 are the induction of cell cycle arrest and apoptosis in response to genotoxic stresses. p53 may cause cell cycle arrest or apoptosis to prevent the accumulation of genetic damage, which can lead to neoplastic transformation. The mechanisms by which p53 accomplishes its biological functions are not yet completely defined but p53 can act as a transcription factor and modulate target gene expression. Only a few genes are known to be directly transactivated *in vivo* by wild-type p53 in response to cellular stress. Researchers from the University of Dundee have identified and characterised novel mouse and human p53 inducible Scotin genes.

New methodology/Advances

To date, few pro-apoptotic genes directly

induced by p53 have been described.

This is probably due to the use of cellular p53 models, which being derived from tumour or immortalised cells are likely to have lost the pro-apoptotic gene expressions. Researchers from the University of Dundee used normal (p53+/+) and p53-nullizygote (p53 -/-) mice to identify new p53-inducible pro-apoptotic genes.

Potential Market

The identification and characterisation of Scotin has both cancer diagnostic and therapeutic applications.

Commercial Opportunity

The researchers from the University of Dundee are seeking a commercial partner for further R&D/licensing arrangements. This technology has the potential for development to a high-throughput screen for identification of novel compounds which may be used in cancer therapy. Scotin may also form a basis for future therapeutic compounds.

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Key attributes:

- Scotin is a new p53-inducible pro-apoptotic gene
- Induces apoptosis independently of p53
- Suitable for development to high-throughput screen
- Potential use as a therapeutic agent
- Patent pending
- Additional information is available under a Confidentiality Agreement

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