

Docket #: S01-135

An in vivo reporter of proteasome function

The invention consists of a plasmid encoding enhanced green fluorescent protein (GFP) modified with a short targeting sequence appended to its carboxyterminus. This targeting sequence converts the normally stable GFP molecule into a short-lived protein and substrate of the ubiquitin proteasome pathway. A clonal cell line, GFPu-1, expressing this construct has been isolated. The fluorescence level of GFPu-1 cells is proportional to the activity of the ubiquitin proteasome system.

Available from ATCC CRL-2794 for evaluation/non-commercial use.

Reference:

Science, Vol.292, pp1552-1555, 2001.

Applications

- To measure intracellular activities and flux through the
- ubiquitin-proteasome pathway

Advantages

- Other known reporter systems use different targeting sequences that are
- not as general as the one used here

Innovators

- Ron Kopito

Licensing Contact

Brenda Martino

Biological Materials Specialist

[Email](#)