Cell name: A-431 x GFP
Cat. No. A-0190

Product description

A-431 x GFP was established by lentiviral transduction of green fluorescent protein (GFP) cDNA into A-431 cells and flow cytometry sorting of the GFP-positive population.

Transgene construct information

Expression cassette type

Single-promoter, monocistronic

Expression cassette map

Expression cassette features

Element	Type	Species	RefSeq	Mutation / Discrepancy
EF1α	promoter, eukaryotic, constitutive	-	-	-
GFP	CDS	-	-	none / none

Transgene protein information

Green fluorescent protein (GFP), originally isolated from the jellyfish *Aequorea victoria*, has gained broad application in cell and molecular biology as a fluorescent marker and reporter of gene expression. Wild-type GFP is a 26.9 kDa protein with beta barrel structure that folds spontaneously and becomes fluorescent at room temperature or 37°C in heterologous expression systems. Since its discovery, numerous variants with altered excitation and emission properties have been engineered. The variant introduced into A-431 is most efficiently excited around 490 nm and emits at 509 nm. GFP-labeled A-431 cells can be utilized, among others, for high-throughput drug testing assays, or *in vivo* fluorescent tracing.

Creative Cell Ltd.

Homepage: www.creativecell.hu Email: info@creativecell.hu Phone: +36 (30) 41-44446

Cell culture characteristics

Source
Human skin epidermoid carcinoma

Morphology
Epithelial

Growth properties
Adherent

Culture conditions
Culture cells at 37°C in humidified atmosphere with 5% CO_2. The base medium for this cell line is α-MEM with 4.5 g/l glucose. To make the complete growth medium, add fetal bovine serum to a final concentration of 10%.

Subculturing
Remove culture medium, rinse twice thoroughly with PBS, and detach cells by treating with 0.04 mL/cm^2 of 0.25% trypsin / 1 mM EDTA solution for 15 minutes at 37°C. Add 5x volume of complete medium to neutralize trypsin-EDTA, pellet cells at 250 x *g*, discard supernatant, and resuspend in culture medium. Subcultivate in a ratio of 1:4-1:6 three times a week. Recommended plating density: 3x10^4 cells/cm^2.

Preservation
Freeze Medium: Complete growth medium with 10% DMSO.
Storage Temperature: Liquid nitrogen vapour phase.

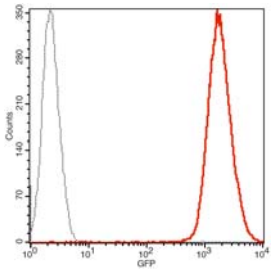
Population doubling time
~30 hours

Sterility testing
Mycoplasma: negative

Comment
This cell line overexpresses Epidermal Growth Factor Receptor (EGFR).

Validation results

A



A: Red line: A431 x GFP
Dotted line: A431
GFP fluorescence detected by flow cytometry at 509 nm.