

Supplementary information

Cell lines	# EGFR molecules per cell	# IFN α R molecules per cell
HeLa ^a	$\sim 2 \times 10^4$	200
A431 ^a	$\sim 2 \times 10^6$	100
Daudi	22	2800
Daudi-EGFR	5640	3600

Supplementary Table 1. EGFR and IFNAR1 quantification by FACS analysis. Using microbeads with defined number of phycoerythrin fluorophore per bead we were able to measure the number of EGFR and IFNAR1 in the cell lines used. ^a The number of EGFR was extracted from literature.²¹

Method

FACS analysis. Single cell suspensions of HeLa, A431, Daudi and Daudi-EGFR were washed in cold PBS, subsequently re-suspended in 0.5 mL of PBS and fixed with 2% formaldehyde (methanol free) for 10 minutes at 4 °C. Cells were washed twice with cold PBS, re-suspended in 70 μ L of PBS and labeled as described by the manufacturer (BD Biosciences) with anti-EGFR R-Phycoerythrin-conjugated mouse mAb or anti-human IFN α / β R-phycoerythrin mouse mAb. The samples were kept in the dark at 4 °C and measured with the flow cytometer within 1 h after staining. The number of receptors per cell was extracted from the calibration curve based on QuantiBRITE™ PE beads (BD Biosciences). QuantiBRITE™ PE beads is a mixture of beads used for estimating the number of antibodies bound per cell (ABC) in cells labeled with Phycoerythrin (PE) conjugated monoclonal antibodies. Each of the four bead populations has a calibrated mean number of bound PE molecules/bead which allowed us to determine the number of bound mAb-PE molecules/cell. 10,000 cells were processed for 1-color fluorescence measurements in a FACScan flow cytometer (488 nm argon laser; Becton Dickinson) equipped with Hewlett Packard hardware and a pulse processor for doublet discrimination. Data acquisition and analysis were performed with the FlowJo software (Tree Star, Inc).