Technical Specification Sheet

ver. 1.0 2025/4/17

Screening specifications for tubulin polymerization

SKU: CDS009

- Kinetic fluorescence or absorbance format
- High sensitivity
- Rapid turn around

Parameter	Specification	Notes
Uniprot ID	P02554	porcine native protein
Amino-acid range	1-445	
Substrates	GTP	
Kinetic assay formats	Absorbance 340 nm Fluorescence Ex 360nm to Em 405-450	traditional most sensitive
Specific activity	5 mg microtubules / ml / OD340nm	absorbance
IC50 examples	650 nM vinblastine 490 nM paclitaxel	
CV	10-12%	eight duplicates
Catalog number	T240	Cytoskeleton catalog

Contacts

Custom Services

tservice@cytoskeleton.com

USA-303-322-2254

Website links

Motors general

Quote form

Additional Information

Fluroescence raw data

Using the Cat.# BK011P format, polymerization is easily measured.

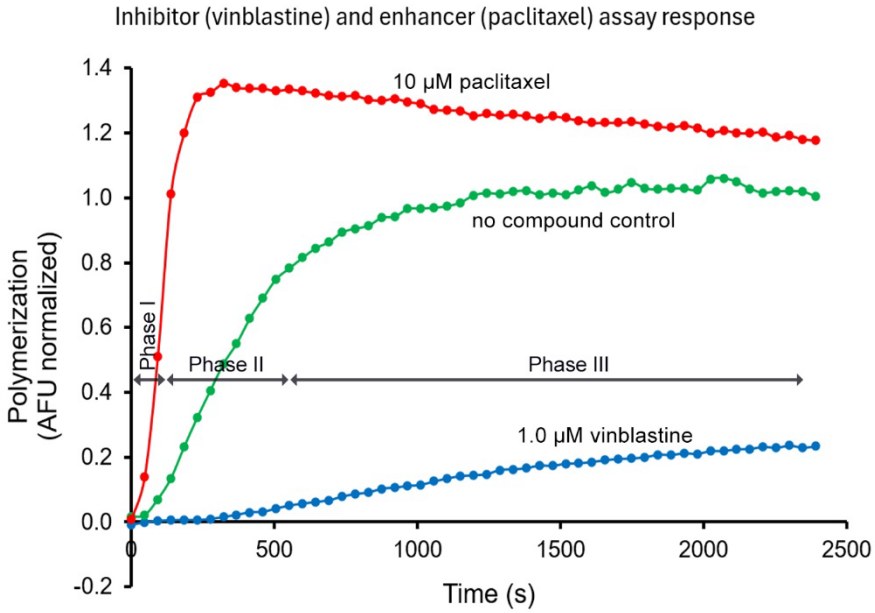

Figure 1 legend: Standard polymerization reactions were carried out as described in the Assay Protocols Section V. Each well of the assay plate contained 5 µl of 10x strength compound which was warmed for 1 min to 37°C, 50 µl of tubulin solution was pipetted into each well. Excitation was at 360 nm and emission at 420 nm. The three phases of tubulin polymerization are shown for the control polymerization curve. Phase I = nucleation, Phase II = growth, Phase III = steady state.

Dose response IC50

4, 8 or 12 pt dose response curves create an accurate IC50 calculation.

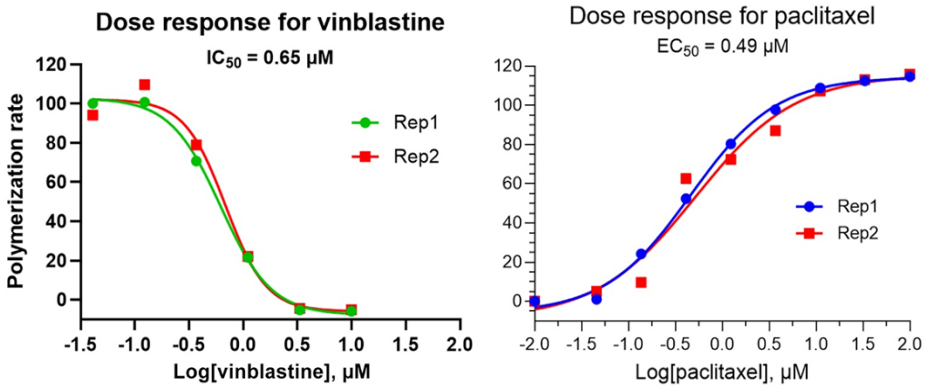

Figure 2 legend: Concentrations of drug were screened at between 10 nM and 10 or 100 µM. The polymerization rates were calculated from the slopes in AFU/min, then these values are plotted against Log10[cmpd] in the graph. A 4th parameter quadratic function is used to fit the curve and calculate the IC50 or EC50 respectively.

Contact information

Technical Support

Application Support

1830 S Acoma St
Denver, CO 80223.
USA
Phone 303-322-2254
www.cytoskeleton.com

Cytoskeleton, INC
The Protein Experts