

Cell Chemical Biology, Volume 25

Supplemental Information

**SRPKIN-1: A Covalent SRPK1/2 Inhibitor
that Potently Converts VEGF from Pro-angiogenic
to Anti-angiogenic Isoform**

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Table S2. The data collection for the crystal of SRPK1 and Alectinib, Related to Figure 2

Data collection	
Space group	P6 ₅ 22
Cell dimensions	a = 74.77 Å, b = 74.77 Å, c = 310.69 Å $\alpha = 90^\circ, \beta = 90^\circ, \gamma = 120^\circ$
Resolution (Å)	30.00 - 2.32
Completeness (%)	99.6 (97.9) ^a
R _{sym} ^b (%)	8.1 (52.4)
Average I/σ	33.67 (2.59)
Multiplicity	13.6 (12.1)
Refinement	
Resolution (Å)	30.00 - 2.32
R _{work} (%)	21.8
R _{free} ^c (%)	23.9
r.m.s.d. ^d	
Bond (Å)	0.0086
Angle (°)	1.3952
Ramachandran statistics	
Favored regions (%)	98
Allowed regions (%)	2
Outliers (%)	0
Clash score	7
Average B-factor	41.0

^aNumbers in parenthesis are for the highest resolution shells.

$$^bR_{\text{sym}} = \frac{\sum |I - \langle I \rangle|}{\sum I}$$

^cR_{free} was calculated with 5% of the data excluded from the refinement calculation.

^dr.m.s.d. indicates root mean square deviation.

Figure S1. Western blot of SR protein phosphorylation upon SRPK1 inhibition by inhibitors. Actin is used as the loading control. Related to Figure 5

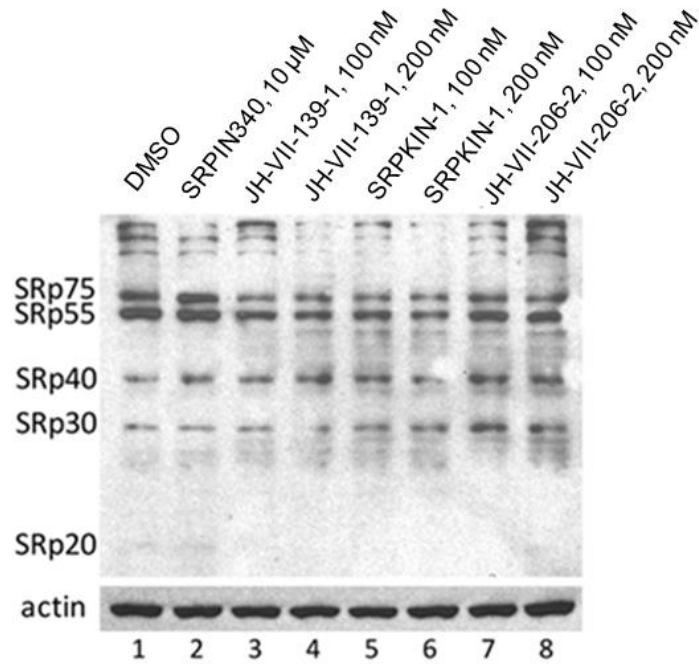


Figure S2. JH-VII-139-1 potently inhibits choroid neovascularization in mouse AMD model. A. Schematics showing the induced burn at Bruch's membrane and angiogenesis at the burned spot. Following staining of blood vessels choroids were prepared as flatmounts for imaging. B. Images of chroid flatmounts stained by FITC-labeled isolectin. CNV areas were measured and plotted in the lower panel. The CNV area was pointed by the arrow. The ratio of remained CNV area with the compound treatment was quantified. Related to Figure 6

