

Supporting Information

for

Chemical modification allows phallotoxins and amatoxins to be used as tools in cell biology

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**Structures of phalloidin derivatives and IC₅₀ concentration values of cell growth
inhibition**

Table S1: Structures of phalloidin derivatives and IC₅₀ values of cell growth inhibition after 72 h incubation time determined by MTT cell proliferation assay (n.a.: not assayed).

	R	Name	IC ₅₀ values K562 cells [μM]	IC ₅₀ values HL-60 cells [μM]	IC ₅₀ values Daudi cells [μM]
1	OH	phalloidin	>1,000	>1,000	>1,000
1a	OCOC ₆ H ₅	(1)-benzoate	26	90	70
1b	OCOC ₆ H ₄ OH	(1)-salicylate	28	83	100
1c	OCOC ₇ H ₁₅	(1)-octanoate	n.a.	n.a.	n.a.
1d	OCOC ₁₃ H ₂₇	(1)-myristate	n.a.	n.a.	n.a.
1e	OCO(CH ₂) ₇ CHCH(CH ₂) ₇ CH ₃	(1)-oleate	2	3	4
2	NH ₂	aminophalloidin	>1,000	>1,000	>1,000
2a	NHCOC ₆ H ₅	N-benzoyl-(2)	26	90	70
2b	NHCO(CH ₂) ₇ CHCH(CH ₂) ₇ CH ₃	N-oleoyl-(2)	n.a.	n.a.	n.a.
2c	NHCO(CH ₂) ₂ SS(Ac)CysGlyTyrGlyArg- -(Lys) ₂ (Arg) ₂ Glu(Arg) ₃ OH	(2)-Tat-peptide	4	6	4
2d	NHCO(CH ₂) ₂ SS(Ac)CysGly(Arg) ₈ OH	(2)-octarginine	n.a.	n.a.	n.a.
2e	NHCO(CH ₂) ₆ CONH(Lys) ₂₁₀	(2)-poly-(L)-lysine _{28,000}	n.a.	n.a.	n.a.
		(2)-poly-(D)-lysine _{28,000}	n.a.	n.a.	n.a.
2f	NHCO(CH ₂) ₂ SS(CH ₂) ₂ CONH(Lys) ₂₁₀	(2)-(SS) poly-(L)- lysine _{28,000}	4	2	2
		(2)-(SS) poly-(D)- lysine _{28,000}	n.a.	n.a.	n.a.
2g	NH(CH ₂) ₂ SS(CH ₂) ₂ CONH(PEG) ₈₀₀	(2)-(SS) PEG ₈₀₀	n.a.	n.a.	n.a.
2h	NH(CH ₂) ₂ SS(CH ₂) ₂ CONH(PEG) _{5,200}	(2)-(SS) PEG _{5,200}	64	93	84
2i	NH(CH ₂) ₂ SS(CH ₂) ₂ CONH(PEG) _{23,000}	(2)-(SS) PEG _{23,000}	n.a.	n.a.	n.a.
2f +DTT	NH(CH ₂) ₂ SH	N-(2-mercaptoethyl)-(2)- SH	n.a.	n.a.	n.a.
3		dithiolanoaminophalloidin TRITC labeled	n.a.	n.a.	n.a.