Supplementary Figure 1. Effect of HSP90 inhibition on mutant KIT signaling. (*a*) *KIT* gene mutation and effects of IM, TAS-116, and 17-AAG in IM-resistant GIST cell lines. (*b*) Western blot analysis of HSP90, HSP70, pKIT/KIT, pAKT/AKT, and pERK/ERK in GIST cell lysates at 12 h after IM, TAS-116, and 17-AAG treatments was performed. (*c-d*) GIST cells were treated with 1 μ M TAS-116 or 0.5 μ M 17-AAG for 12 h. The cells were stained with anti-KIT (green), anti-phosphorylated KIT Y⁷⁰³ (anti-KIT Y⁷⁰³, green), and anti-GM130 (Golgi marker, red or blue). Dashed lines indicate cell borders. Bars, 20 μ m.

Supplementary Figure 2. Effects of HSP90 inhibition on KIT distribution in GIST R9 cells. (*a-c*) GIST R9 cells were treated with 1 μ M TAS-116 or 0.5 μ M 17-AAG for 12 h. Cells were stained with anti-KIT (green), anti-phosphorylated KIT Y703 (anti-KIT Y⁷⁰³, green), anti-GM130 (Golgi marker, red or blue), and anti-PDI antibodies (ER marker, red). Dashed lines indicate cell borders. Bars, 20 μ m.

Supplementary Figure 1

а													
	Cell line KIT mutation				IC ₅₀ (nM)								
		Prim	ary	Se	condary	TA	S-116	17/	AAG	ima	tinib		
	GIST48/820	Exon11	V560D	Exon	17 D820A	2	88.8	4	7.4	>1	1000		
	GIST430/654	Exon1	1 del	Exon	13 V654A	1	64.4	2	8.5	>1	1000		
Ŀ			GIST4	8			G	IST4:	30				
Ø			тлс	116				тл	S 116				
		at ib	5	5-110	-	at	ġ	<u> </u>	5-110		(1)		
		No tre Imatin	0.25µľ	0.5µМ 1.0µМ	17AAG	No tre	Imatin	0.25µl	0.5µM	1.0µM	17AAG	(kDa	ı)
	HSP90		-	-	-	-	-	"		- 5	-	90	
	HSP70					-		-	-	-	-	— 70	
	p-KIT	-	1222		in the last	-	-	-			hint	145 120	5
	KIT		-	-	1 1998	100			Second Brown	Sci La	-	145 —120	5
	p-p44/42 MAPK	-	and the		20024		-	Part P	1		Marga -	= 44	
	p44/42 MAPK					1	ä				I	$= \frac{44}{42}$	
	p-AKT		1000			-	-	-	1.6	-	Sec. Sa	60	
	AKT		-		_	-	-	-	-	-	-	60	
	GAPDH	_	-			-	-	-	-	-		37	
С	GIS	ST48/820						GIS	Г430/	654			
27.0	KIT	GM	130	Merge		Tree	atmost:	КЛ		10	GM130	•	Merge
	None	1.00				Trea	atment: Nor	ne	1	-			1
	×		-					1			102		14
	кт	GM	130	Merge				KIT			GM130		Merge
	TAS-116			¢ *	* *		TAS-11	6					1.1
	кт	GM	130	Merge				KIT	1	3	GM130		Merce
	17-AAG				9		17 -AA	3					2.3
				**	-							0	- V 8
)						T420	1654			
d	рКТТ ^{У703}	GM	130	Merge	0			рК	Т430/ Г ^{ула}	/034	GM130	×	Merge 💉
	Treatment: None	at.				Tre	atment: No	ne					A
		1.							10		1		er.
	рКТ ⁷⁷⁰³	GM	130	Merge				рK	П ^{ү703}		GM130		Merge
	TAS-116			· /3			TAS-11	6					A
			-	2.1	-						1		-V
	PKIT ^{Y703}	GM	130	Merge				рК	Пула		GM130		Merge
	17-AAG			1.1			1 7-AA	G			÷.		R

Supplementary Figure 2

а	C	GIST-R9		
Treatm	ent: None	KIT	GM130	Merge
	TAS-116	КІТ	GM130	Merge
	17-AAG	KIT	GM130	Merge
b Treatm	ent: None	KIT	PDI	Merge
	TAS-116	KIT	PDI	Merge
	17-AAG	КІТ	PDI	Merge
C				
Treatm	ent: None	pKIT ^{Y703}	GM130	Merge

atment: None	рКIТ ^{ү703}	GM130	Merge
	14177703		
TAS-116	pki j	GM130	Merge
17-AAG	рКП ^{¥703}	GM130	Merge