

Table 1. Platelet-derived growth factor receptor (PDGFR) signaling through phospholipase C γ (PLC γ) and phosphatidylinositol 3-kinase (PI3K) is required for mesoderm cell survival

Binding site(s)	mRNA	<i>n</i>	DMSO/AP1510	Normal, %	Dead cells, %
Wild type	<i>iPDGFRα/R37</i>	215	DMSO	30	70
	<i>iPDGFRα/R37</i>	214	AP1510	65	35
	<i>iPDGFRα-F572/4/R37</i>	49	DMSO	33	67
No Src	<i>iPDGFRα-F572/4/R37</i>	49	AP1510	55	45
	<i>iPDGFRα-Y572/4/R37</i>	41	DMSO	22	78
Only Src	<i>iPDGFRα-Y572/4/R37</i>	38	AP1510	21	79
	<i>iPDGFRα-F720/R37</i>	47	DMSO	38	62
No SHP-2	<i>iPDGFRα-F720/R37*</i>	46	AP1510	59	39
	<i>iPDGFRα-Y720/R37*</i>	43	DMSO	23	74
Only SHP-2	<i>iPDGFRα-Y720/R37</i>	46	AP1510	28	72
	<i>iPDGFRα-F731/42/R37</i>	45	DMSO	2	98
No PI3K	<i>iPDGFRα-F731/42/R37</i>	47	AP1510	2	98
	<i>iPDGFRα-Y731/42/R37</i>	35	DMSO	29	71
Only PI3K	<i>iPDGFRα-Y731/42/R37</i>	35	AP1510	26	74
	<i>iPDGFRα-F762/R37</i>	36	DMSO	33	67
No Crk	<i>iPDGFRα-F762/R37</i>	40	AP1510	73	28
	<i>iPDGFRα-Y762/R37</i>	27	DMSO	15	85
Only Crk	<i>iPDGFRα-Y762/R37</i>	24	AP1510	17	83
	<i>iPDGFRα-F988/R37</i>	51	DMSO	25	75
No Tyr 988	<i>iPDGFRα-F988/R37</i>	44	AP1510	23	77
	<i>iPDGFRα-Y988/R37*</i>	45	DMSO	13	84
Only Tyr 988	<i>iPDGFRα-Y988/R37*</i>	43	AP1510	9	88
	<i>iPDGFRα-F1018/R37</i>	30	DMSO	10	90
No PLC γ	<i>iPDGFRα-F1018/R37</i>	30	AP1510	13	87
	<i>iPDGFRα-Y1018/R37</i>	34	DMSO	18	82
Only PLC γ	<i>iPDGFRα-Y1018/R37*</i>	35	AP1510	17	77
	<i>iPDGFRα-F720/62/R37</i>	46	DMSO	37	63
Src, PI3K, and PLC γ	<i>iPDGFRα-F720/62/R37*</i>	49	AP1510	69	28
	<i>iPDGFRα-F4/R37*</i>	50	DMSO	24	74
PI3K and PLC γ	<i>iPDGFRα-F4/R37</i>	51	AP1510	53	47
	<i>iPDGFRα</i>	228	DMSO	100	0
Control	<i>iPDGFRα*</i>	232	AP1510	99	0

The data presented in Figs. 2-4 are shown. The percentage of embryos that do not contain apoptotic cells (i.e., cells with nonnuclear β -gal staining) is presented for embryos injected with mRNA as described for Figs. 2-4 and with DMSO or AP1510. This percentage is low for some mutants compared with wild type because there may be some basal activity of the receptor construct without the addition of dimerizer. β -gal, β -galactosidase with a nuclear localization signal; *iPDGFR*, *inducible* PDGFR.

*The remaining percentage of embryos died as a result of microinjection.