

**S3 Table. Most highly predicted phenotypes for *PEAR1*.**

Phenotype	# of Shared Relationships	Score
Endothelial cell migration	12	136
Vasculogenesis	11	103
Angiogenesis	20	86
Lymphangiogenesis	8	70
Neovascularization	11	57
Endothelial cell proliferation	9	55
Platelet aggregation	7	55
Cell adhesion	15	52
Paracrine Signaling	13	51
Cell migration	14	51
Embryonic development	14	47
Focal adhesions	9	45
Dermal fibroblasts	9	42
Hypoxia-inducible	10	41
Endothelial cell surface	6	40
Cell motility	10	38
Endothelial cell growth	6	38
Transdifferentiation	7	37
DNA methylation	11	37
Tyrosine phosphorylation	11	36
Leukocyte extravasation	5	36
Signal transduction	15	36
Retinal endothelial cell	5	35
Carotid artery	11	34
Chemotaxis	10	34
Wound healing	11	34
Angiogenesis inhibitors	7	33
Angiogenic phenotype	5	33
Cell proliferation	16	33
Nuclear translocation	10	32
Signal transduction pathways	11	32
Cell differentiation	12	31
Regulation of angiogenesis	5	30
Heparin binding	7	30
Clopidogrel	5	29
Response to LPS	7	29
Tissue homeostasis	7	29
Adiponectin levels	6	29
Morphogenesis	10	29
Sprouting angiogenesis	4	28

Capillary morphogenesis	4	28
Glomerular filtration rate	7	19
Phagocytosis	8	18

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