

hRad51	-----MAMQMQLLEANADTSVEEES-----FGPQPISRLEQCGINANDVKKLEEAGFHTVEA	51
PbRad51	MKSANAKEDTISQTCDNSTTEEVDHLYAGPLKIEQLLAKGFVKRDLELLKEGGLQTVEC	60
	* : :. ..*.*. ** ** *.:* *: .*: :*:.*:****.	
hRad51	VAYAPKKELINIKGISEAKADKILAEAAKLVPMGFTTATEFHQRRSEIIQITTGSKELDK	111
PbRad51	VAYAPMRTLCSIKGISEQKAEKLLKACKELCNSGFCNAIDYHDARQNLIKFTTGSKQLDA	120
	***** : * .***** **:*. . :* ** .* :*: *.*:*:*****:*	
hRad51	LLQGGIETGSITEMFGEFRTGKTQICHTLAVTCQLPIDRGGGEGKAMYIDTEGTFRPERL	171
PbRad51	LLKGGIETGGITELFGEFRTGKSQLCHTLAITCQLPIEQSGGEGKCLWIDTEGTFRPERI	180
	*:*****.***:*****:*:*****:*****:*.*****.:*****:*****:	
hRad51	LAVAERYGLSGSDVLDNVAYARAFNTDHQTQLLYQASAMMVESRYALLIVDSATALYRTD	231
PbRad51	VAIAKRYGLHPTDCLNNIAYAKAYNCDHQTELLIDASAMMADTRFALLIVDSATALYRSE	240
	:*:*:***** :* *:*:*****:*. *****:*****.***:*****:*****:	
hRad51	YSGRGELSARQMHLARFLRMLLRLADEFGVAVVITNQVVAQVDGAAMFAADPKKPIGGNI	291
PbRad51	YTGRGELANRQSHLCRFLRLGLQRIDIYGVAVIITNQVVAQVDAMSMFGGHEKIPIGGNI	300
	*:*****: ** *.***** * *:*. *****:*****:*****.***:***. * *****	

Additional file 3: Fig. S3 Human and *P. berghei* Rad51 alignment.

Red characters in human Rad51 indicate amino acid residues interacting with vital phenylalanine residues F1524 and F1546 in BRC repeat 4. Blue characters indicate the amino acid residues that differ from the human Rad51 amino acid residues required for interaction with F1524 and F154 in BRC repeat 4.