

Heat shock 60 protein (HSP60) sequence alignment and location of epitope for EnCor **MCA-1C7** antibody

Human	MLRLPTVFRQMRPVSRLAPHLTRAYAKDVKFGADARALMLQGVDLLADAVAVTMGPKGR	60
Mouse	MLRLPTVLRQMRPVSRLAPHLTRAYAKDVKFGADARALMLQGVDLLADAVAVTMGPKGR	60
Rat	MLRLPTVLRQMRPVSRLAPHLTRAYAKDVKFGADARALMLQGVDLLADAVAVTMGPKGR	60
	*****:*****.*****	
Human	TVILEQSWGSPKVTKQGVTVAKSIDLKDKYKNI GAKLVQDVANN TNEEAGDGT TTTATVLA	120
Mouse	TVILEQSWGSPKVTKQGVTVAKSIDLKDKYKNI GAKLVQDVANN TNEEAGDGT TTTATVLA	120
Rat	TVILEQSWGSPKVTKQGVTVAKSIDLKDKYKNI GAKLVQDVANN TNEEAGDGT TTTATVLA	120
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Human	RSTIAKEGFEKISKGANPVEIRRGVMLAVDAVIAELKKQSKPVTTPEETIAQVATISANGDK	180
Mouse	RSTIAKEGFEKISKGANPVEIRRGVMLAVDAVIAELKKQSKPVTTPEETIAQVATISANGDK	180
Rat	RSTIAKEGFEKISKGANPVEIRRGVMLAVDAVIAELKKQSKPVTTPEETIAQVATISANGDK	180
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Human	EIGNIISDAMKKVGRKGVITVKDGKTLNDELEIIEGKFD RGYISPYFINTSKGOKCEEFQ	240
Mouse	EIGNIISDAMKKVGRKGVITVKDGKTLNDELEIIEGKFD RGYISPYFINTSKGOKCEEFQ	240
Rat	EIGNIISDAMKKVGRKGVITVKDGKTLNDELEIIEGKFD RGYISPYFINTSKGOKCEEFQ	240
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Human	DAYVLLSEKKISSIQSIVPALEIANAHRKPLVIIAEDVDGEALSTLVLNRLKVGLOVVAV	300
Mouse	DAYVLLSEKKISSVQSIVPALEIANAHRKPLVIIAEDVDGEALSTLVLNRLKVGLOVVAV	300
Rat	DAYVLLSEKKISSVQSIVPALEIANAHRKPLVIIAEDVDGEALSTLVLNRLKVGLOVVAV	300
	*****:*****	
Human	KAPGFGDNRKNQLKDMAIATGGAVFGEEGLTLNLEDVQPHDLGKVG EVIVTKODAMLLKG	360
Mouse	KAPGFGDNRKNQLKDMAIATGGAVFGEEGLTLNLEDVQPHDLGKVG EVIVTKODAMLLKG	360
Rat	KAPGFGDNRKNQLKDMAIATGGAVFGEEGLTLNLEDVQPHDLGKVG EVIVTKODAMLLKG	360
	*****.*****	
	<-----MCA-1C7----->	
Human	KGDKAQIEKRIQEITEQLDVTTSEYEKEKLNERLAKLS DGVAVLKVGGS DVEVNEKKDR	420
Mouse	KGDKAHIEKRIQEITEQLDIT TSEYEKEKLNERLAKLS DGVAVLKVGGS DVEVNEKKDR	420
Rat	KGDKAHIEKRIQEITEQLDIT TSEYEKEKLNERLAKLS DGVAVLKVGGS DVEVNEKKDR	420
	*****:*****	
Human	VTDALNATRAAVEEGIVLGGGCALLRCIPALD SLTPANEDQKIGIETIIKRIILKIPAMTIA	480
Mouse	VTDALNATRAAVEEGIVLGGGCALLRCIPALD SLK PANEDQKIGIETIIKRALKIPAMTIA	480
Rat	VTDALNATRAAVEEGIVLGGGCALLRCIPALD SLK PANEDQKIGIETIIKRALKIPAMTIA	480
	*****.*****	
Human	KNAGVEGSLIVEKIMQSSSEVGYDAMAGDFVNMVEKGIIDPTKVVRTALLDAAGVASLLT	540
Mouse	KNAGVEGSLIVEKILQSSSEVGYDAMLGDFVNMVEKGIIDPTKVVRTALLDAAGVASLLT	540
Rat	KNAGVEGSLIVEKILQSSSEVGYDAMLGDFVNMVEKGIIDPTKVVRTALLDAAGVASLLT	540
	*****:*****	
Human	TAEVVVTEIPKEEKDPGMGAMGGMGGGMGGGMF	573
Mouse	TAEAVVTEIPKEEKDPGMGAMGGMGGGMGGGMF	573
Rat	TAEAVVTEIPKEEKDPGMGAMGGMGGGMGGGMF	573
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Sequence alignment of human, mouse and rat HSP60 molecules. The rat and mouse sequences are identical and differ from human in only 12 positions out of 573, about 2%. The peptide LNERLAKLS DGVAVLKVGGS, amino acids 390-409, contains the MCA-1C7 sequence and is invariant in all known vertebrate HSP60 sequences. As a result this antibody will be an excellent western blotting standard and mitochondrial marker in utility in studies of a variety of species.