



# Library Indian Institute of Science Education and Research Mohali



**DSpace@IISERMohali (/jspui/)**  
**/ Publications of IISER Mohali (/jspui/handle/123456789/4)**  
**/ Research Articles (/jspui/handle/123456789/9)**

Please use this identifier to cite or link to this item: <http://hdl.handle.net/123456789/3494>

Title:	Mammalian proapoptotic factor ChaC1 and its homologues function as $\gamma$ -glutamyl cyclotransferases acting specifically on glutathione
Authors:	Kaur, Amandeep (/jspui/browse?type=author&value=Kaur%2C+Amandeep) Bachhawat, A.K. (/jspui/browse?type=author&value=Bachhawat%2C+A.K.)
Keywords:	$\gamma$ -glutamyl cyclotransferases 5-oxoproline apoptosis ChaC1
Issue Date:	2012
Publisher:	European Molecular Biology Organization.
Citation:	EMBO Reports, 13(12) PP. 1095-1101.
Abstract:	ChaC1 is a mammalian proapoptotic protein of unknown function induced during endoplasmic reticulum stress. We show using in vivo studies and novel in vitro assays that the ChaC family of proteins function as $\gamma$ -glutamyl cyclotransferases acting specifically to degrade glutathione but not other $\gamma$ -glutamyl peptides. The overexpression of these proteins (but not the catalytically dead E>Q mutants) led to glutathione depletion and enhanced apoptosis in yeast. The ChaC family is conserved across all phyla and represents a new pathway for glutathione degradation in living cells, and the first cytosolic pathway for glutathione degradation in mammalian cells
Description:	Only IISERM authors are available in the record.
URI:	<a href="https://www.embopress.org/doi/full/10.1038/embor.2012.156">https://www.embopress.org/doi/full/10.1038/embor.2012.156</a> ( <a href="https://www.embopress.org/doi/full/10.1038/embor.2012.156">https://www.embopress.org/doi/full/10.1038/embor.2012.156</a> ) <a href="http://hdl.handle.net/123456789/3494">http://hdl.handle.net/123456789/3494</a> ( <a href="http://hdl.handle.net/123456789/3494">http://hdl.handle.net/123456789/3494</a> )
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format	
Need to add pdf.odt (/jspui/bitstream/123456789/3494/1/Need%20to%20add%20pdf.odt)		8.63 kB	OpenDocument Text	<a href="#">View/Open (/jspui/bitstream/123456789/3494/1/Need%20to%20add%20pdf.odt)</a>

Show full item record (/jspui/handle/123456789/3494?mode=full)

(/jspui/handle/123456789/3494/statistics)

Items in DSpace are protected by copyright, with all rights reserved, unless otherwise indicated.

