Scope: Self Format: HTML Amount: Quick GEO accession: gse7645 GO

Series GSE7645

Query DataSets for GSE7645

Status	Public on Oct 24, 2007
Title	Expression data for Saccharomyces cerevisiae oxidative stress response
Organism	Saccharomyces cerevisiae
Experiment type	Expression profiling by array
Summary	Oxidative stress is a harmful condition in a cell, tissue, or organ, caused by an imbalnace between reactive oxygen species and other oxidants and the capacity of antioxidant defense systems to remove them. The budding yeast S. cerevisiae has been the major eukaryotic model for studies of response to oxidative stress. We used microarrays to study the genome-wide temporal response of the yeast S. cerevisiae to oxidative stress induced by cumene hydroperoxide. Keywords: time course
Overall design	The effects of oxidative stress induced by CHP on the transcriptional profile of S. cerevisiae was studied from a dynamical perspective. Yeast cultures were grown in controlled batch conditions, in 1 L fermentors. Three replicate cultures in mid-exponential phase were exposed to 0.19 mM CHP, while three non-treated cultures were used as controls. Samples were collected at t=0 (immediately before adding CHP) and at 3,6,12,20,40,70 and 120 min after adding the oxidant. Samples were processed for RNA extraction and profiled using Affymetrix Yeast Genome S98 arrays.
Contributor(s)	Sha W, Martins A, Laubenbacher R, Mendes P, Shulaev V
Citation(s)	Sha W, Martins AM, Laubenbacher R, Mendes P et al. The genome-wide early temporal response of Saccharomyces cerevisiae to oxidative stress induced by cumene hydroperoxide. *PLoS One* 2013;8(9):e74939. PMID: 24073228
Submission date	Apr 26, 2007
Last update date	Jun 08, 2012
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Country	USA
Platforms (1)	GPL90 [YG_S98] Affymetrix Yeast Genome S98 Array
Samples (48)	GSM184944 Control, t=0 min, biological replicate 1 GSM184945 Control, t=3 min, biological replicate 1 GSM184946 Control, t=6 min, biological replicate 1 GSM184947 Control, t=12 min, biological replicate 1

Less...

GSM184948 Control, t=20 min, biological replicate 1
GSM184949 Control, t=40 min, biological replicate 1
GSM184950 Control, t=70 min, biological replicate 1
GSM184951 Control, t=120 min, biological replicate 1
GSM184952 Control, t=0 min, biological replicate 2
GSM184953 Control, t=3 min, biological replicate 2
GSM184954 Control, t=6 min, biological replicate 2
GSM184955 Control, t=12 min, biological replicate 2
GSM184956 Control, t=20 min, biological replicate 2
GSM184957 Control, t=40 min, biological replicate 2
GSM184958 Control, t=70 min, biological replicate 2
GSM184959 Control, t=120 min, biological replicate 2
GSM184960 Control, t=0 min, biological replicate 3
GSM184961 Control, t=3 min, biological replicate 3
GSM184962 Control, t=6 min, biological replicate 3
GSM184963 Control, t=12 min, biological replicate 3
GSM184964 Control, t=20 min, biological replicate 3
GSM184965 Control, t=40 min, biological replicate 3
GSM184966 Control, t=70 min, biological replicate 3
GSM184967 Control, t=120 min, biological replicate 3
GSM184968 CHP, t=0 min, biological replicate 1
GSM184969 CHP, t=3 min, biological replicate 1
GSM184970 CHP, t=6 min, biological replicate 1
GSM184971 CHP, t=12 min, biological replicate 1
GSM184972 CHP, t=20 min, biological replicate 1
GSM184973 CHP, t=40 min, biological replicate 1
GSM184974 CHP, t=70 min, biological replicate 1
GSM184975 CHP, t=120 min, biological replicate 1
GSM184976 CHP, t=0 min, biological replicate 2
GSM184977 CHP, t=3 min, biological replicate 2
GSM184978 CHP, t=6 min, biological replicate 2
GSM184979 CHP, t=12 min, biological replicate 2
GSM184980 CHP, t=20 min, biological replicate 2
GSM184981 CHP, t=40 min, biological replicate 2
GSM184982 CHP, t=70 min, biological replicate 2
GSM184983 CHP, t=120 min, biological replicate 2
GSM184984 CHP, t=0 min, biological replicate 3
GSM184985 CHP, t=3 min, biological replicate 3
GSM184986 CHP, t=6 min, biological replicate 3
GSM184987 CHP, t=12 min, biological replicate 3
GSM184988 CHP, t=20 min, biological replicate 3
GSM184989 CHP, t=40 min, biological replicate 3
GSM184990 CHP, t=70 min, biological replicate 3

GSM184991 ChIP, t=120 min, biological replicate 3

Relations

BioProject PRJNA99763

Analyze with GEO2R

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MINiML formatted family file(s)	MINiML
Series Matrix File(s)	TXT

Supplementary file	Size	Download	File type/resource
GSE7645_RAW.tar	59.7 Mb	(http)(custom)	TAR (of CEL)
Raw data provided as supplementary file			