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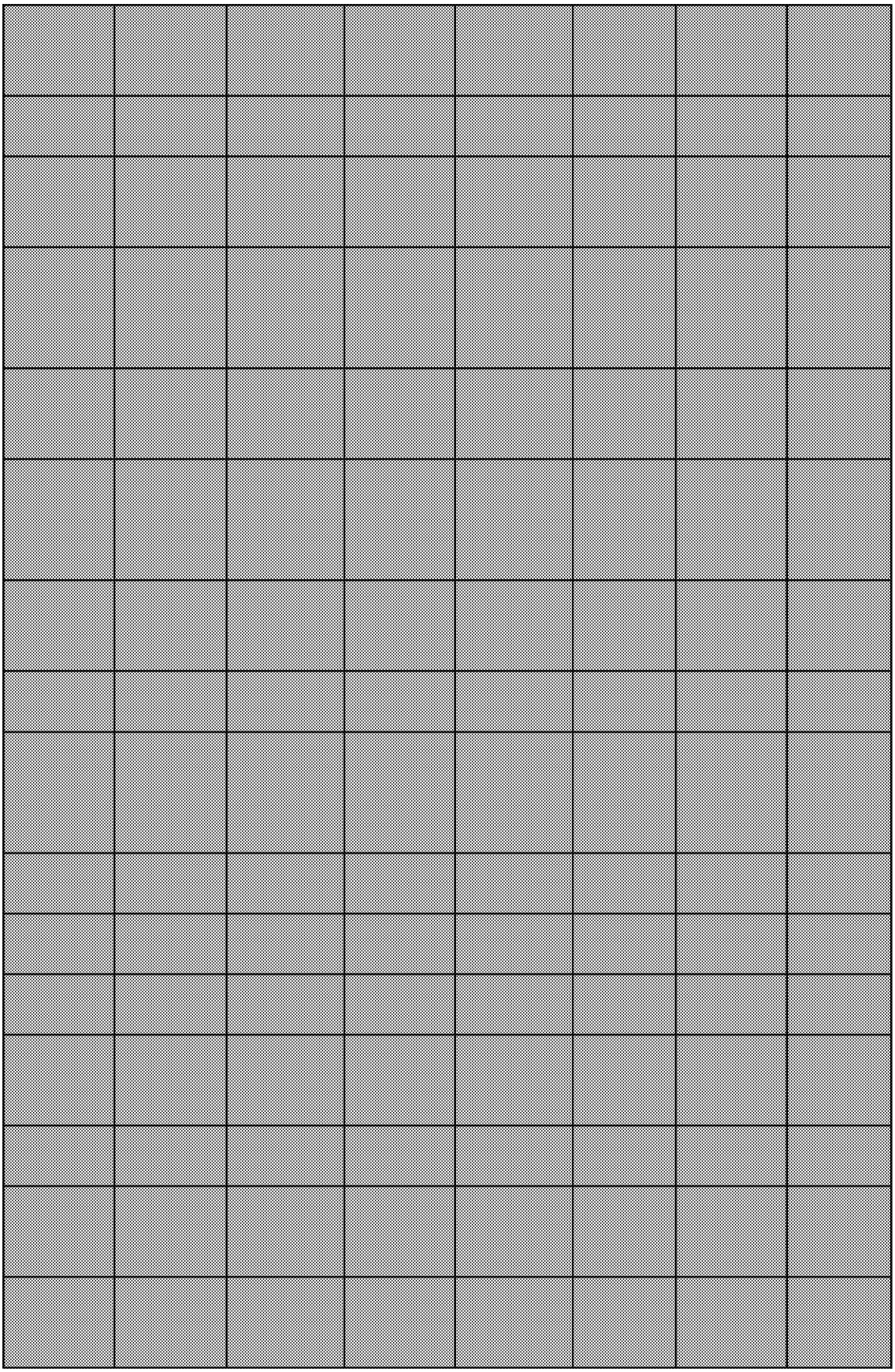

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Fur (ferric uptake regulator) is a prokaryotic transcriptional regulator that controls a large number of genes mainly relate
The ability to induce cellular defense mechanisms in response to environmental challenges is a fundamental property of
Nitric oxide (NO) is emerging as a key regulator of diverse plant cellular processes. A major route for the transfer of NO b
Nitroreductase A catalyzes the divalent reduction of nitro compounds, quinones, and dyes by NADPH. In this paper, nitro
Formation of nonnative disulfide bonds in the cytoplasm, so-called disulfide stress, is an integral component of oxidative
The charged quaternary ammonium compounds--methyl, ethyl and benzyl viologens--generate reactive oxygen species i
A new oxidative stress-responsive bacterial biosensor was constructed using the promoter of the pgi gene fused to the lu
The full-length cDNA of CaAbsi1 encodes a presumptive protein of 134 amino acid residues that has homology to a putat
All organisms have defense systems against oxidative stress that include multiple genes of antioxidant defense. These ge
Manganese ions (Mn(2+)) play a crucial role in virulence and protection against oxidative stress in bacterial pathogens. S
Citrus salt-stress associated protein (Cit-SAP) reveals significant sequence homology to mammalian glutathione peroxida
NRAMPs (natural resistance-associated macrophage proteins) have been characterized in mammals as divalent transitio
The ability to adapt to acute oxidative stress (e.g. H(2)O(2), peroxynitrite, menadione, and paraquat) through transient a
We determined the complete nucleotide sequence of conjugative plasmid pUM505 isolated from a clinical strain of Pseu
Actinobacillus pleuropneumoniae is the causative agent of porcine pleuropneumonia, a disease characterized by pulmon
The role of the prqR gene in the regulation of the adaptive response of the cyanobacterium Synechocystis sp. PCC6803 t
Autophagy degrades toxic materials and old organelles, and recycles nutrients in eukaryotic cells. Whereas the studies o
We tested the hypothesis that during metabolism of naphthalene and other substrates by Pseudomonas sp. strain As1 o

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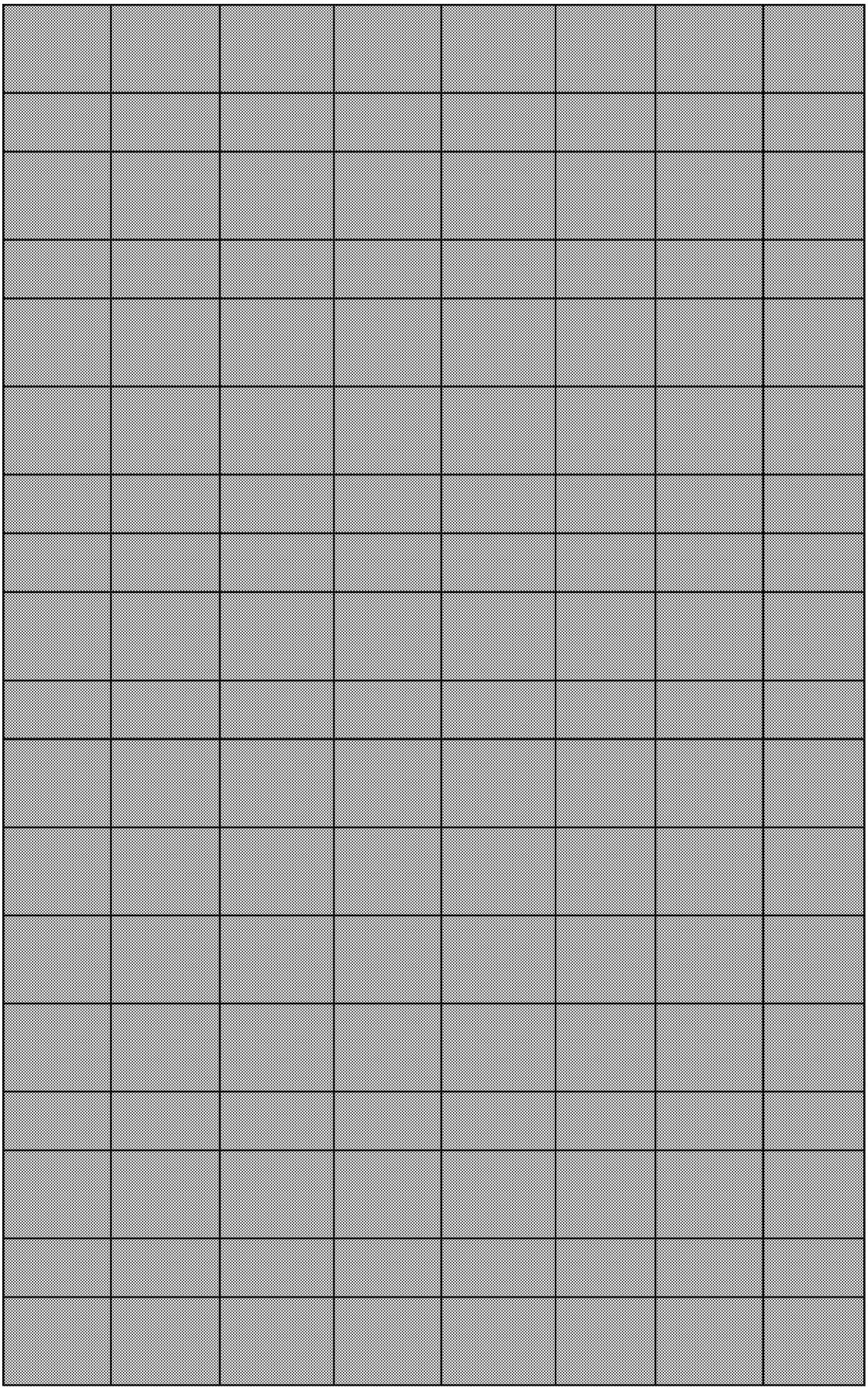

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The structural gene of human Cu/Zn superoxide dismutase (hSOD1) was cloned into a yeast expression vector containing
Glutathione reductase (GR) plays an essential role in a cell's defense against reactive oxygen metabolites by sustaining th
Recombination repair protein 1 (Rrp1) includes a C-terminal region homologous to several DNA repair proteins, including
The yeast peptide-methionine sulfoxide reductase (MsrA) was overexpressed in a Saccharomyces cerevisiae null mutant
The effects of redox-sensitive proteins on Escherichia coli were investigated by overexpressing Pseudomonas 2-nitroben
rcd1 is a mutant of Arabidopsis thaliana that is more resistant to methyl viologen, but more sensitive to ozone than the w
Roles of oxidative stress and photoinhibition in high light acclimation were studied using a regulatory mutant of the cyan
A plasmid containing a transcriptional fusion of the Escherichia coli katG promoter to a truncated Vibrio fischeri lux oper
The Arabidopsis thaliana atr7 mutant is tolerant to oxidative stress induced by paraquat (PQ) or the catalase inhibitor am
Survival of Bacteroides fragilis in the presence of oxygen was dependent on the ability of bacteria to synthesize new prot
Candida dubliniensis is a yeast species closely related to Candida albicans, but in contrast to C. albicans, limited informat
It is important to know responses of the pathogenic fungi to reactive oxygen species by which hosts protect themselves a
The Sca permease in the oral bacterium Streptococcus gordonii is a member of a family of ATP-binding cassette (ABC)-ty
Many natural proteins have been developed into drugs and produced for direct application. Identifying improved hosts t
The Saccharomyces cerevisiae yap1 null strain was transformed with a Chlamydomonas reinhardtii cDNA expression libr
An oxidative stress-specific bacterial cell array chip was fabricated and implemented in the analysis of various different c
Within a large family of peroxidases, one member that catalyzes the reduction of organic peroxides to alcohols is known

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