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Do not confuse PMCID with PMID. PMID is a unique identifier assigned to each citation as it is added to PubMed. It is distinctly different from PMCID and is used only for PubMed records.

The screenshot shows the PubMed search results for the query "terri kinzy nih". The search results are displayed in a list format. The first article is "ADP-ribosylation of translation elongation factor 2 by diphtheria toxin in yeast inhibits translation and cell separation." by Mateyak MK, Kinzy TG. The second article is "The many roles of the eukaryotic elongation factor 1 complex." by Sasikumar A, Perez WB, Kinzy TG. A red box highlights the PMID: 22555874 for the second article, and a red arrow points to it with the text "This is NOT a PMCID!".

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The screenshot shows the PubMed search results for the query "terri kinzy nih". The search results are displayed in a list format. The format dropdown menu is open, showing options: Summary, Summary (text), Abstract, Abstract (text), MEDLINE, XML, and PMID List. The "Abstract (text)" option is highlighted with a red box and a red arrow points to it.

In the “Abstract” display, you will see the PMCID at lower right next to the PMID beneath the citation. In the “Abstract (text)” display, you will see the PMCID above the PMID beneath the citation. This is the number you must include on NIH proposals, applications and reports

Display Settings: Abstract, 20 per page, Sorted by Recently Added **Send to:**

Abstract Display
Results: 1 to 20 of 40

1. ADP-ribosylation of translation elongation factor 2 by diphtheria toxin in yeast inhibits translation and cell separation.
Mateyak MK¹, Kinzy TG.
Author information

Abstract
Eukaryotic translation elongation factor 2 (eEF2) facilitates the movement of the peptidyl tRNA-mRNA complex from the A site of the ribosome to the P site during protein synthesis. ADP-ribosylation (ADP(R)) of eEF2 by bacterial toxins on a unique diphthamide residue inhibits its translocation activity, but the mechanism is unclear. We have employed a hormone-inducible diphtheria toxin (DT) expression system in *Saccharomyces cerevisiae* which allows for the rapid induction of ADP(R)-eEF2 to examine the effects of DT in vivo. ADP(R) of eEF2 resulted in a decrease in total protein synthesis consistent with a defect in translation elongation. Association of eEF2 with polyribosomes, however, was unchanged upon expression of DT. Upon prolonged exposure to DT, cells with an abnormal morphology and increased DNA content accumulated. This observation was specific to DT expression and was not observed when translation elongation was inhibited by other methods. Examination of these cells by electron microscopy indicated a defect in cell separation following mitosis. These results suggest that expression of proteins late in the cell cycle is particularly sensitive to inhibition by ADP(R)-eEF2.

KEYWORDS: ADP-ribosylation, Bacterial Toxins, Cell Cycle, Diphthamide, Protein Synthesis, Translation Elongation Factors

PMCID: PMC3750162 [Available on 2014/8/23]
PMID: 23853096 [PubMed - indexed for MEDLINE]

Abstract (text) Display
ADP-ribosylation of translation elongation factor 2 by diphtheria toxin in yeast inhibits translation and cell separation.
Mateyak MK(1), Kinzy TG.
Author information:
(1)Department of Biochemistry and Molecular Biology, Robert Wood Johnson Medical School, Rutgers, The State University of New Jersey, Piscataway, New Jersey 08854, USA.
Eukaryotic translation elongation factor 2 (eEF2) facilitates the movement of the peptidyl tRNA-mRNA complex from the A site of the ribosome to the P site during protein synthesis. ADP-ribosylation (ADP(R)) of eEF2 by bacterial toxins on a unique diphthamide residue inhibits its translocation activity, but the mechanism is unclear. We have employed a hormone-inducible diphtheria toxin (DT) expression system in *Saccharomyces cerevisiae* which allows for the rapid induction of ADP(R)-eEF2 to examine the effects of DT in vivo. ADP(R) of eEF2 resulted in a decrease in total protein synthesis consistent with a defect in translation elongation. Association of eEF2 with polyribosomes, however, was unchanged upon expression of DT. Upon prolonged exposure to DT, cells with an abnormal morphology and increased DNA content accumulated. This observation was specific to DT expression and was not observed when translation elongation was inhibited by other methods. Examination of these cells by electron microscopy indicated a defect in cell separation following mitosis. These results suggest that expression of proteins late in the cell cycle is particularly sensitive to inhibition by ADP(R)-eEF2.

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If the paper is successfully processed but not yet publicly available in PMC, PubMed will also list the date the paper will become available, as shown in the above citation.

Example citation with PMCID:

Mateyak MK, Kinzy TG. ADP-ribosylation of translation elongation factor 2 by diphtheria toxin in yeast inhibits translation and cell separation. *The Journal of biological chemistry*. 2013;288(34):24647-55. Epub 2013/07/16. doi: 10.1074/jbc.M113.488783. PubMed PMID: 23853096; PubMed Central PMCID: PMC3750162.

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- use **NIHMSID** up to 3 months after publication date when using Submission Method C or D.

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