

MPG glycosylase mediated recognition and binding of ethenoadenine

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Introduction

Reactome is open-source, open access, manually curated and peer-reviewed pathway database. Pathway annotations are authored by expert biologists, in collaboration with Reactome editorial staff and cross-referenced to many bioinformatics databases. A system of evidence tracking ensures that all assertions are backed up by the primary literature. Reactome is used by clinicians, geneticists, genomics researchers, and molecular biologists to interpret the results of high-throughput experimental studies, by bioinformaticians seeking to develop novel algorithms for mining knowledge from genomic studies, and by systems biologists building predictive models of normal and disease variant pathways.

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Literature references

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- Sidiropoulos, K., Viteri, G., Sevilla, C., Jupe, S., Webber, M., Orlic-Milacic, M. et al. (2017). Reactome enhanced pathway visualization. *Bioinformatics*, 33, 3461-3467. [↗](#)
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Reactome database release: 70

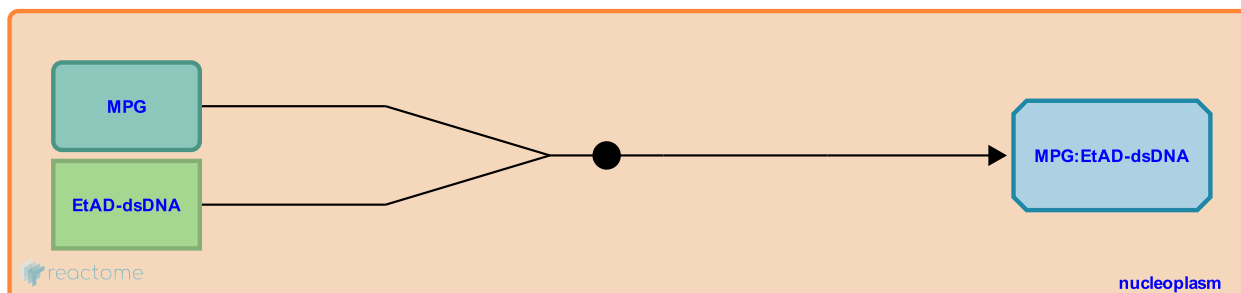
This document contains 1 reaction ([see Table of Contents](#))

MPG glycosylase mediated recognition and binding of ethenoadenine ↗

Stable identifier: R-HSA-110239

Type: binding

Compartments: nucleoplasm



MPG, a 3-methyladenine DNA glycosylase, recognizes alkylation damage of DNA in the form of 1,N6-ethenoadenine (Dosanjh et al. 1994, Saparbaev et al. 1995).

Literature references

Dosanjh, MK., Roy, R., Mitra, S., Singer, B. (1994). 1,N6-ethenoadenine is preferred over 3-methyladenine as substrate by a cloned human N-methylpurine-DNA glycosylase (3-methyladenine-DNA glycosylase). *Biochemistry*, 33, 1624-8. ↗

Saparbaev, M., Kleibl, K., Laval, J. (1995). Escherichia coli, Saccharomyces cerevisiae, rat and human 3-methyladenine DNA glycosylases repair 1,N6-ethenoadenine when present in DNA. *Nucleic Acids Res.*, 23, 3750-5. ↗

Editions

2004-02-03	Authored, Edited	Matthews, L.
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