

Diphthamide is an Achilles heel shared by both plants and animals

July 15 2022



Identification and phenotypes of Arabidopsis dph1 mutants. a Scheme of first step of diphthamide biosynthesis in yeast and human. SAM S-adenosylmethionine, MTA 5'-methylthioadenosine. b Arabidopsis hygromycin sensitivity. Photograph of 12-day-old seedlings of the wild-type (WT), dph1-1, dph1-2, and dph1-1 pDPH1:DPH1-GFP complemented line Y22-10 cultivated without (control) or with 2 μ M hygromycin B (hyg). c–e Growth of WT, dph1, and complementation lines on 0.5× MS medium, shown as photograph (c), fresh biomass (d), and primary root length (e) of 12-day-old seedlings. Scale bar, 10



mm (c). Data are mean \pm s.d., n = 4 pools of between 5 and 6 seedlings, with each pool sampled from an independent petri plate (d, e). Significant differences from WT: *P

Citation: Diphthamide is an Achilles heel shared by both plants and animals (2022, July 15) retrieved 15 August 2024 from <u>https://phys.org/news/2022-07-diphthamide-achilles-heel-animals.html</u>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.