

#4294 Store at -20C

PHLDA3 Antibody



Cell Signaling
TECHNOLOGY®

Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
H M R Mk	Endogenous	15	Rabbit	#Q9Y5J5	23612

Product Usage Information	Application Western Blotting	Dilution 1:1000
Storage	Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
Specificity / Sensitivity	PHLDA3 Antibody detects endogenous level of total PHLDA3 protein.	
Source / Purification	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human PHLDA3 protein. Antibodies are purified by protein A and peptide affinity chromatography.	
Background	Pleckstrin homology-like domain family A member 3 (PHLDA3) is one of three relatively small, similar proteins that share a common pleckstrin homology (PH) domain. Expression of PHLDA3 and the related PHLDA1 occurs in several fetal and adult tissues, in contrast to the more restricted expression of PHLDA2 seen in mouse tissues (1). PHLDA3 is one of several proteins induced following treatment of tumor cells with cisplatin, an anti-cancer drug that cross-links DNA and promotes apoptosis through activation of the tumor suppressor p53 (2). Additional evidence that PHLDA3 is involved in promoting apoptosis through p53 came from a study examining the opposing effects of p53 and Akt in tumor development. Tumor suppressor p53 binds the PHLDA3 promoter to induce transcription. Induced overexpression of PHLDA3 increases apoptosis while deletion of PHLDA3 results in increased Akt activity and a reduction in p53-mediated apoptosis. PHLDA3 appears to compete with the PH domain of Akt, preventing Akt activation and promotion of Akt-induced cell survival pathways (3).	
Background References	1. Frank, D. et al. (1999) <i>Mamm Genome</i> 10, 1150-9. 2. Kerley-Hamilton, J.S. et al. (2005) <i>Oncogene</i> 24, 6090-100. 3. Kawase, T. et al. (2009) <i>Cell</i> 136, 535-50.	

Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).
Western Blot Buffer	IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.
Cross-Reactivity Key	H: human M: mouse R: rat Hm: hamster Mk: monkey Vir: virus Mi: mink C: chicken Dm: D. melanogaster X: Xenopus Z: zebrafish B: bovine Dg: dog Pg: pig Sc: S. cerevisiae Ce: C. elegans Hr: horse GP: Guinea Pig Rab: rabbit All: all species expected
Trademarks and Patents	Cell Signaling Technology is a trademark of Cell Signaling Technology, Inc. All other trademarks are the property of their respective owners. Visit cellsignal.com/trademarks for more information.
Limited Uses	<p>Except as otherwise expressly agreed in a writing signed by a legally authorized representative of CST, the following terms apply to Products provided by CST, its affiliates or its distributors. Any Customer's terms and conditions that are in addition to, or different from, those contained herein, unless separately accepted in writing by a legally authorized representative of CST, are rejected and are of no force or effect.</p> <p>Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or</p>

therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.