

Product datasheet for TA336465

OriGene Technologies, Inc.

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D4 (ARHGDIB) Mouse Monoclonal Antibody [Clone ID: 97A1015]

Product data:

Product Type: Primary Antibodies

Clone Name: 97A1015

Applications: FC, IHC, IP, WB

Recommended Dilution: Flow Cytometry: 0.5-1 ug/10^6 cells, Immunohistochemistry: 1:10-1:500,

Immunoprecipitation: 1-2 ug/ml, Western Blot: 2 ug/ml, Immunohistochemistry-Paraffin: 1:10-

1:500, Flow (Intracellular): 0.5-1 ug/10^6 cells

Reactivity: Human, Mouse

Host: Mouse

Isotype: IgG2b, kappa
Clonality: Monoclonal

Immunogen: A synthetic peptide corresponding to the region of the Fas-induced cleavage site of human

D4-GDI/RhoGDI2 was used as the immunogen.

Formulation: PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -

20C long term. Avoid freeze-thaw cycles.

Concentration: lot specific

Purification: Protein G purified

Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Gene Name: Rho GDP dissociation inhibitor beta

Database Link: NP 001166

Entrez Gene 11857 MouseEntrez Gene 397 Human

P52566



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Background:

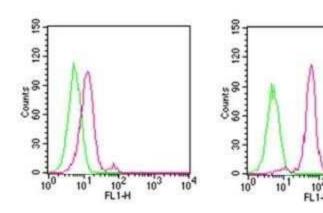
D4-GDI (GDP dissociation inhibitor) is a negative regulator of the ras-related Rho family of GTPases. Since the Rho GTPases promote cytoskeletal and membrane changes associated with apoptotic cell death, the removal of the D4-GDI block through its cleavage is important for inducing apoptosis. Caspase-3 cleaves the 28 kD mature form of D4-GDI to give a 23 kD and 5 kD size fragment. The 23 kD fragment then translocates to the nucleus. The mechanisms involving cleavage of D4-GDI with apoptosis are not presently known. Activation of the Jun N-terminal kinase, a regulator of apoptosis, may be one of the mechanisms.

Synonyms: D4; GDIA2; GDID4; Ly-GDI; LYGDI; RAP1GN1; RhoGDI2

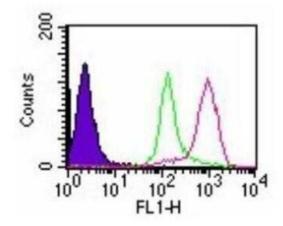
Protein Families: Druggable Genome

Protein Pathways: Neurotrophin signaling pathway

Product images:

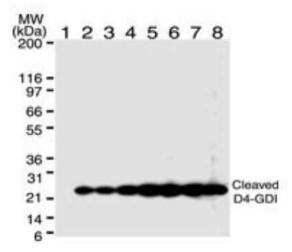


Flow (Intracellular): D4-GDI/RhoGDI2 Antibody (97A1015) - (cleavage specific) TA336465 - Analysis using the FITC conjugate of TA336465. Staining of cleaved D4-GDI in untreated (left) and staurosporine-treated (right) Ramos cells using 0.5 ug of was used for this test.

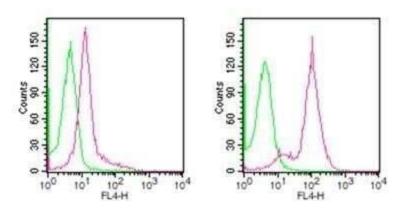


Flow (Intracellular): D4-GDI/RhoGDI2 Antibody (97A1015) - (cleavage specific) TA336465 - Analysis using the FITC conjugate of TA336465. Staining of cleaved D4-GDI in 10^6 camptothecintreated (red) and untreated (green) HL60 cells using 0.5 ug of NB100-56060. The shaded histogram represents cells without antibody.

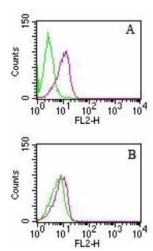




Western Blot: D4-GDI/RhoGDI2 Antibody (97A1015) - (cleavage specific) TA336465 - WB analysis: HL60 cells were treated for different time periods with 10 ng/ml of anti-Fas mAb (TA336465, Clone DX2). Harvested cells were lysed and resolved by SDS-PAGE and transferred onto membrane. D4-GDI/RhoGDI2 cleavage was detected.

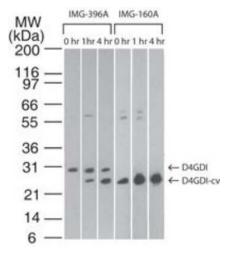


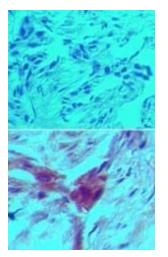
Flow (Intracellular): D4-GDI/RhoGDI2 Antibody (97A1015) - (cleavage specific) TA336465 - Intracellular analysis of cleaved D4-GDI in 10^6 untreated (left) and 3 hour staurosporine-treated (right) Jurkat cells using 0.5 ug of this antibody was used for this test. Green histogram represents isotype control; red represents anti-D4-GDI antibody. Image using the Alexa Fluor 647 format of this antibody.



Flow (Intracellular): D4-GDI/RhoGDI2 Antibody (97A1015) - (cleavage specific) TA336465 - HL60 cells were left untreated (green) or treated with camptothecin to induce apoptosis (red). Cells were analyzed by intracellular flow cytometry using either the (0.5 ug antibody/test/1 million cells) and ((as seen in B). this is because (cells not undergoing apoptosis) and cleaved (apoptotic cells) forms of D4-GDI.







Western Blot: D4-GDI/RhoGDI2 Antibody (97A1015) - (cleavage specific) TA336465 - Western blot analysis of D4GDI in Jurkat cells using NB100-56556 (IMG-396A) at 2 ug/ml and TA336465 (IMG-160A) at 0.1 ug/ml. Cells were treated with 2 uM staurosporine for different time periods. NB100-56556 (IMG-396A) detects both the full-length and cleaved forms of D4GDI. While (TA336465) IMG-160A specifically detects only the cleaved form of the protein.

Immunohistochemistry-Paraffin: D4-GDI/RhoGDI2 Antibody (97A1015) - (cleavage specific) TA336465 - analysis of D4GD1-cv in formalin-fixed, paraffin-embedded human breast tumor tissue using an isotype control (top) and this antibody.