

DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human DAB2 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human DAB2 Lys630-Ala770 Accession # P98082
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

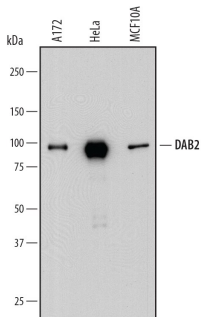
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below

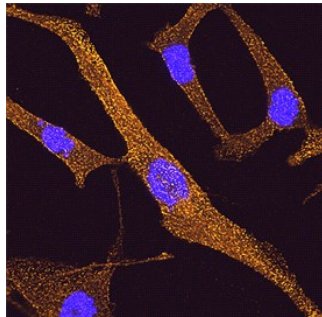
DATA

Western Blot



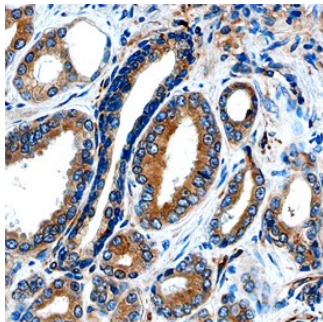
Detection of Human DAB2 by Western Blot. Western blot results for A172, HeLa and MCF 10A cell line lysates. A PVDF membrane was probed with 0.5 µg/mL of Goat Anti-Human DAB2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8064) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for DAB2 at approximately 96 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



DAB2 in A172 Human Cell Line. DAB2 was detected in immersion fixed A172 cells using Goat Anti-Human DAB2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8064) at 1.7 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). Specific staining was localized in the cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

Immunohistochemistry



DAB2 in Human Prostate. DAB2 was detected in formalin fixed paraffin-embedded sections of human prostate using Goat Anti-Human DAB2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF8064) at 3 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm of epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

DAB2 (Drosophila disabled homolog 2; also DOC-2/Differentially-expressed in Ovarian Carcinoma and p96) is a cytoplasmic phosphoprotein. Although its predicted MW is 82 kDa, it runs anomalously at 95-105 kDa in SDS-PAGE. It is widely expressed, being found in ovarian cuboidal epithelium, megakaryocytes, fibroblasts, macrophages, breast epithelium and renal proximal tubule cells. Reduced expression levels are associated with tumor development. DAB2 has multiple functions, but is typically described as an adaptor protein (i.e.-one that supports the apposition of two interacting molecules) involved in intracellular trafficking. Molecules reported to interact with DAB2 include megalin, SMAD2 plus TGF- β R1/II, axin and Dvl3. With respect to trafficking, DAB2 reportedly binds to AP-2, clathrin, LRP6 and myosin VI, four molecules associated with the endocytic process. Human DAB2 is 770 amino acids (aa) in length. It contains one pleckstrin homology-like domain that binds phosphotyrosine (aa 42-170) and a C-terminal Pro-rich region that binds SH3 domains (aa 600-630). There are two isoform variants. One is 80-82 kDa in size and shows a deletion of aa 230-447. The second exhibits a short deletion of aa 209-229. Over aa 630-770, human DAB2 shares 76% aa sequence identity with mouse DAB2.