

**PDCD6 Antibody (Center)**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP20782c**

**Specification**

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**PDCD6 Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O75340</a>
Other Accession	<a href="#">P12815</a>
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	21868

**PDCD6 Antibody (Center) - Additional Information**

**Gene ID** 10016

**Other Names**

Programmed cell death protein 6, Apoptosis-linked gene 2 protein, Probable calcium-binding protein ALG-2, PDCD6, ALG2

**Target/Specificity**

This PDCD6 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 103-137 amino acids from the Central region of human PDCD6.

**Dilution**

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

PDCD6 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

**PDCD6 Antibody (Center) - Protein Information**

**Name** PDCD6

**Synonyms** ALG2 {ECO:0000250|UniProtKB:P12815}

**Function** Calcium sensor that plays a key role in processes such as endoplasmic reticulum (ER)-Golgi vesicular transport, endosomal biogenesis or membrane repair. Acts as an adapter that bridges unrelated proteins or stabilizes weak protein-protein complexes in response to calcium: calcium-binding triggers exposure of apolar surface, promoting interaction with different sets of proteins thanks to 3 different hydrophobic pockets, leading to translocation to membranes (PubMed:[20691033](#), PubMed:[25667979](#)). Involved in ER-Golgi transport by promoting the association between PDCD6IP and TSG101, thereby bridging together the ESCRT-III and ESCRT-I complexes (PubMed:[19520058](#)). Together with PEF1, acts as a calcium-dependent adapter for the BCR(KLHL12) complex, a complex involved in ER-Golgi transport by regulating the size of COPII coats (PubMed:[27716508](#)). In response to cytosolic calcium increase, the heterodimer formed with PEF1 interacts with, and bridges together the BCR(KLHL12) complex and SEC31 (SEC31A or SEC31B), promoting monoubiquitination of SEC31 and subsequent collagen export, which is required for neural crest specification (PubMed:[27716508](#)). Involved in the regulation of the distribution and function of MCOLN1 in the endosomal pathway (PubMed:[19864416](#)). Promotes localization and polymerization of TFG at endoplasmic reticulum exit site (PubMed:[27813252](#)). Required for T-cell receptor-, Fas-, and glucocorticoid-induced apoptosis (By similarity). May mediate Ca(2+)-regulated signals along the death pathway: interaction with DAPK1 can accelerate apoptotic cell death by increasing caspase-3 activity (PubMed:[16132846](#)). Its role in apoptosis may however be indirect, as suggested by knockout experiments (By similarity). May inhibit KDR/VEGFR2-dependent angiogenesis; the function involves inhibition of VEGF-induced phosphorylation of the Akt signaling pathway (PubMed:[21893193](#)). In case of infection by HIV-1 virus, indirectly inhibits HIV-1 production by affecting viral Gag expression and distribution (PubMed:[27784779](#)).

#### **Cellular Location**

Endoplasmic reticulum membrane; Peripheral membrane protein. Cytoplasmic vesicle, COPII-coated vesicle membrane. Cytoplasm. Nucleus. Endosome Note=Interaction with RBM22 induces relocalization from the cytoplasm to the nucleus (PubMed:[17045351](#)). Translocated from the cytoplasm to the nucleus after heat shock cell treatment. Accumulates in cytoplasmic vesicle-like organelles after heat shock treatment, which may represent stress granules (PubMed:[21122810](#)). In response to calcium increase, relocates from cytoplasm to COPII vesicle coat (PubMed:[27716508](#)) Localizes to endoplasmic reticulum exit site (ERES) (PubMed:[27813252](#))

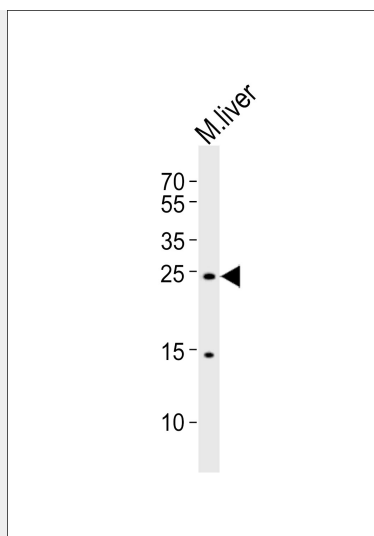
#### **PDCD6 Antibody (Center) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **PDCD6 Antibody (Center) - Images**





Western blot analysis of lysate from mouse liver tissue lysate, using PDCD6 Antibody (Center)(Cat. #AP20782c). AP20782c was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.

#### **PDCD6 Antibody (Center) - Background**

Calcium-binding protein required for T-cell receptor-, Fas-, and glucocorticoid-induced cell death. May mediate  $\text{Ca}^{2+}$ - regulated signals along the death pathway (By similarity). Calcium-dependent adapter necessary for the association between PDCD6IP and TSG101. Interaction with DAPK1 can accelerate apoptotic cell death by increasing caspase-3 activity. May inhibit KDR/VEGFR2-dependent angiogenesis; the function involves inhibition of VEGF-induced phosphorylation of the Akt signaling pathway. Seems to play a role in the regulation of the distribution and function of MCOLN1 in the endosomal pathway. Isoform 2 has a lower  $\text{Ca}^{2+}$  affinity than isoform 1. Isoform 1 and, to a lesser extent, isoform 2, can stabilize SHISA5.

#### **PDCD6 Antibody (Center) - References**

Ganji J.K.,et al.Submitted (NOV-1997) to the EMBL/GenBank/DDBJ databases.  
Urcelay E.,et al.Submitted (MAY-1996) to the EMBL/GenBank/DDBJ databases.  
Ota T.,et al.Nat. Genet. 36:40-45(2004).  
Kalline N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.  
Schmutz J.,et al.Nature 431:268-274(2004).