

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PDCD4 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 808508
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PDCD4 Lys212-His358 Accession # Q53EL6
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.

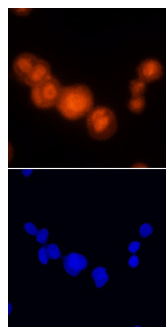
APPLICATIONS

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
Immunocytochemistry	8-25 µg/mL	See Below

DATA

Immunocytochemistry



PDCD4 in MCF-7 Human Cell Line. PDCD4 was detected in immersion fixed MCF-7 human breast cancer cell line using Mouse Anti-Human PDCD4 Monoclonal Antibody (Catalog # MAB7019) at 25 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to nuclei and cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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

PDCD4 (Programmed cell death protein 4; also H731) is a 54-64 kDa member of the PDCD4 family of molecules. It is widely expressed, being found in mammary epithelium, CD34+ bone marrow progenitor cells, fibroblasts and keratinocytes. PDCD4 is both cytoplasmic and nuclear. In the cytoplasm, it blocks protein translation by binding to eIF4A, an act that dissociates eIF4G and mRNA from eIF4A. In the nucleus, it seems to block transcription of select genes, one of which is MAP4K1, a key enzyme in the AP-1-mediated transcription pathway. Human PDCD4 is 469 amino acids (aa) in length. It contains an NLS (aa 58-64), an MI domain (aa 163-284), another NLS (aa 241-250) and a second MI domain (aa 326-449). There are at least seven utilized Ser/Thr phosphorylation sites and one Tyr phosphorylation site. There are two potential splice forms, one that contains a deletion of aa 15-28, and a second that may show a three aa substitution for aa 2-15. Over aa 212-357, human PDCD4 shares 98% aa identity with mouse PDCD4.