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PDI (C81H6) Rabbit mAb (Alexa Fluor® 488 Conjugate)

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

Applications: IF-IC	Reactivity: H M R Mk	Sensitivity: Endogenous	Source/Isotype: Rabbit	UniProt ID: #P07237	Entrez-Gene Id: 5034
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Product Usage Information	Application Immunofluorescence (Immunocytochemistry)	Dilution 1:50
Storage	Supplied in PBS (pH 7.2), less than 0.1% sodium azide and 2 mg/ml BSA. Store at 4°C. Do not aliquot the antibody. Protect from light. Do not freeze.	
Specificity/Sensitivity	PDI (C81H6) Rabbit mAb (Alexa Fluor® 488 Conjugate) detects endogenous levels of total PDI protein.	
Source / Purification	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to the sequence of human PDI.	
Description	This Cell Signaling Technology antibody is conjugated to Alexa Fluor® 488 fluorescent dye and tested in-house for direct immunofluorescent analysis in human cells. The antibody is expected to exhibit the same species cross-reactivity as the unconjugated PDI (C81H6) Rabbit mAb #3501.	
Background	During their synthesis, secretory proteins translocate into the endoplasmic reticulum (ER) where they are post-translationally modified and properly folded. To reach their native conformation, many secretory proteins require the formation of intra- or inter-molecular disulfide bonds (1). This process is called oxidative protein folding. Protein disulfide isomerase (PDI) catalyzes the formation and isomerization of these disulfide bonds (2). Studies on mechanisms of oxidative folding suggest that molecular oxygen oxidizes the ER-protein Ero1, which in turn oxidizes PDI through disulfide exchange (3). This event is then followed by PDI-catalyzed disulfide bond formation in folding proteins (3).	
Background References	<ol style="list-style-type: none"> Huppa, J.B. and Ploegh, H.L. (1998) <i>Cell</i> 92, 145-148. Ellgaard, L. and Ruddock, L.W. (2005) <i>EMBO Rep.</i> 6, 28-32. Tu, B.P. and Weissman, J.S. (2004) <i>J. Cell Biol.</i> 164, 341-346. 	
Species Reactivity	Species reactivity is determined by testing in at least one approved application (e.g., western blot).	
Applications Key	IF-IC: Immunofluorescence (Immunocytochemistry)	
Cross-Reactivity Key	H: Human M: Mouse R: Rat Mk: Monkey	
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