

Anti-PEF1 Rabbit Monoclonal Antibody

Introduction

Calcium-binding protein that acts as an adapter that bridges unrelated proteins or stabilizes weak protein-protein complexes in response to calcium. Together with PDCD6, acts as calcium-dependent adapter for the BCR(KLHL12) complex, a complex involved in endoplasmic reticulum (ER)-Golgi transport by regulating the size of COPII coats (PubMed:27716508). In response to cytosolic calcium increase, the heterodimer formed with PDCD6 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). Its role in the heterodimer formed with PDCD6 is however unclear: some evidences show that PEF1 and PDCD6 work together and promote association between PDCD6 and SEC31 in presence of calcium (PubMed:27716508). Other reports show that PEF1 dissociates from PDCD6 in presence of calcium, and may act as a negative regulator of PDCD6 (PubMed:11278427). Also acts as a negative regulator of ER-Golgi transport; possibly by inhibiting interaction between PDCD6 and SEC31.

Product parameters

Alternative Names	penta-EF-hand domain containing 1; ABP32; PEF1A
Gene ID	553115
Gene Name	PEF1
SwissProt ID	Q9UBV8
Host	Rabbit
Reactivity	Human, Mouse, Rat
Molecular Weight	Calculated MW: 30 kDa; Observed MW: 30 kDa
Conjugation	Unconjugated
Ex	-
Em	-
Modification	Unmodified
C <mark>lonal</mark> ity	IgG3 (O)
Isotype	Monoclonal Antibody
Clonality No.	AP-2D12H9
Form	Liquid
Concentration	See label
Carrier	Carrier Not Free

Immunogen	A synthetic peptide of human PEF1
Purification	Affinity Purified
Buffer System	50mM Tris-Glycine (pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA.
Application	WB, IP
Dilution Ratio	WB: 1/500-1/1000 IP: 1/20
Research Field	Cell Biology
Produ <mark>ct Cat</mark> egories	Primary antibody A P E B O
Shipping	Blue ice
Storage	-20°C
Expiration Date	12 months
Note	Please avoid freeze-thaw cycles.

Protocol

Configure the product according to the application range and recommended dilution ratio.

*Note: The primary antibody dilution buffer options: WB - Primary Antibody Dilution Buffer (Cat. #: K1200, Not for HRP/AP conjugated antibodies), Immunostaining - Immunol Staining Primary Antibody Dilution Solution (Cat. #: K4655).





1. This product is for scientific research use only.













