

Human/Mouse MCM2 Alexa Fluor® 488-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF5778G 100 µg

DESCRIPTION		
Species Reactivity	Human/Mouse	
Specificity	Detects human and mouse MCM2 in Western blots.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	E. coli-derived recombinant human MCM2 Asp143-Ser296 Accession # P49736	
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm	
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide	
	*Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.	

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.			
Western Blot	Optimal dilution of this antibody should be experimentally determined.		
Immunohistochemistry	Optimal dilution of this antibody should be experimentally determined.		

PREPARATION AND STORAGE		
Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.	
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied	

BACKGROUND

CM2 (Minichromosome maintenance protein 2; also BM28) is a member of the MCM family of proteins. Although its predicted MW is 102 kDa, it runs anomalously at 125 kDa in SDS-PAGE. MCM2 forms a large, 450-600 kDa prereplication complex with MCM3 through 7 plus HBO1, and associates with the ORC to initiate DNA synthesis. Human MCM2 is 904 amino acids (aa) in length (Accession # P49736). It contains one C4-type zinc finger region (aa 329-355) and a P-loop NTPase region (aa 485-659) and at least 12 Ser/Thr phosphorylation sites in the N-terminal one-third of the molecule. MCM2 has several potential isoforms. There is an alternate start site at Met10 with or without a 47 aa substitution for aa 109-157, a deletion of aa 31-126, a Gly substitution for aa 113-132 coupled with a 69 aa insertion after Lys476, and a seven aa substitution for aa 1-137. Over aa 143-296, human MCM2 shares 99% aa identity with mouse MCM2.

PRODUCT SPECIFIC NOTICES

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