

DESCRIPTION

Species Reactivity	Human
Specificity	Detects a synthetic peptide around aa 235 in Direct ELISA
Source	Monoclonal Mouse IgG _{2B} Clone # 1082626
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	ATP5A1 containing synthetic peptide Accession # P25705
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

Immunocytochemistry	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

ATP5F1A is a 553aa, 60kDa protein which encodes subunit alpha of mitochondrial ATP synthase (complex V), the rotary ATPase responsible for more than 90% of cellular ATP synthesis. F-type ATPases have 2 components, CF1 - the catalytic core - and CF0 - the membrane proton channel. CF1 has five subunits: alpha3, beta3, gamma1, delta1, epsilon1. CF0 has three main subunits: a, b and c. ATP5A1 is generally regarded to mediate tumor progression through mitochondrial signaling. It is overrepresented in an oxidative phosphorylation pathway associated with tumorigenesis and tumor progression. Dysregulation of this ATP synthase subunit is observed in human carcinomas.

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