

TECHNICAL DATA SHEET
Catalog # MSA07
ApoTrack™ Cytochrome c Apoptosis ICC Antibody Kit

Rev.1

LOT #:
COMPONENTS: Primary antibodies specific for Cytochrome *c* and Complex V α :

Kit component	Antigen	Clone ID	Isotype	Conc. (mg/mL)	Amount (μ g)
Anti-Cyt <i>c</i> mAb	Cytochrome <i>c</i>	37BA11	IgG2a, κ	1	50
Anti-CV α mAb	Complex V α	15H4C4	IgG2b, κ	1	50

Fluorophore-conjugated goat anti-mouse Secondary antibodies:

Goat anti-mouse IgG2a-FITC	1	50
Goat anti-mouse IgG2b-TXRD	1	50

Additional components:

- 30 mL Detergent (0.1% Triton® X-100 in PBS)
- 20 mL 100% Normal Goat Serum
- 100 mL Buffer (10X PBS, pH 7.4)

APPLICATIONS: Immunocytochemistry analysis of cytochrome *c* and a mitochondrial marker (Complex V α) in apoptotic cells and non-apoptotic cells.

HOST SPECIES: Mouse

mAb PURITY: Near homogeneity as judged by SDS-PAGE. The antibody was produced *in vitro* using hybridomas grown in serum-free medium, and then purified by biochemical fractionation.

STORAGE CONDITIONS: Store Goat Serum at -20°C. Store all other components at 4°C.

COUNTRY OF ORIGIN: USA

BACKGROUND:

Cytochrome *c* is a water-soluble mitochondrial intermembrane-space protein loosely attached to the inner mitochondrial membrane and is approximately 13 kDa. It plays important roles in two processes: oxidative phosphorylation and apoptosis. As an electron carrier in oxidative phosphorylation, cytochrome *c* shuttles four electrons (one at a time) via its heme group from Complex III (cytochrome *c* reductase) to Complex IV (cytochrome *c* oxidase). As a crucial player in apoptosis (programmed cell death), cytochrome *c* is released from the mitochondria to the cytosol where it binds to an adaptor subunit, APAF-1 in the presence of dATP, leading to activation of caspase 9. Caspase 9 triggers activation of other caspases which cleave and destroy other proteins. This results in cell death.

Note: This product is for research purposes only. It is not to be used in humans or for diagnostic purposes.

WARRANTY – MitoSciences Inc warrants that products will perform as indicated in the published Technical Data Sheet for 6 months from date of purchase when stored according to specifications and when used consistent with recommended protocols. If you experience results which materially differ from those described, send evidence of the non-performing product for replacement of the original product purchased or a credit toward any other of the company's products or services.