

## [KD Validated] Anti-ETFA Mouse mAb

Purified Recombinant Rabbit Monoclonal Antibody

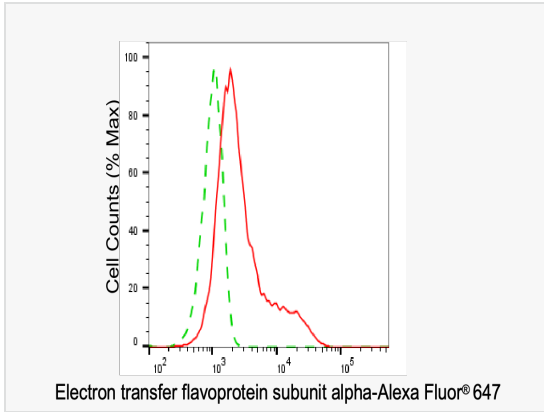
Catalog # M020720

### Product Information

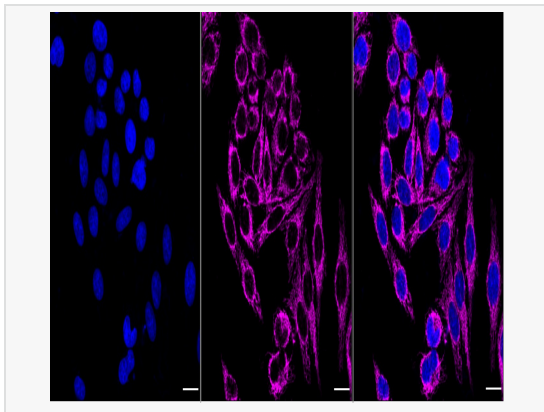
Application	WB, FC, IF (Cell)/ICC
Reactivity	Human, Mouse
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000; IF 1:100~1:1,000
Host	Mouse
Clonality	Monoclonal
Clone No.	39G69K42
Isotype	IgG
Label	Unconjugated
Immunogen	Recombinant protein of human ETFA
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-ETFA Mouse mAb [39G69K42] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

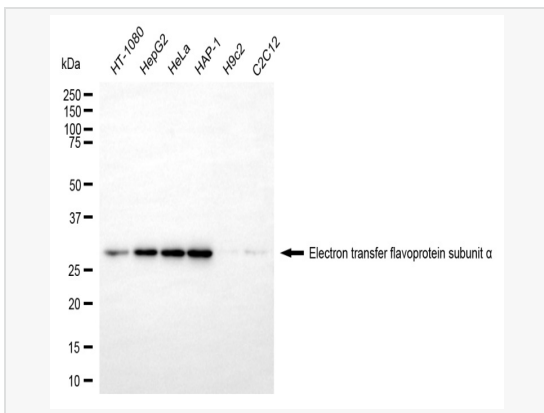
Synonyms	ETFA; Electron Transfer Flavoprotein Subunit Alpha; MADD; GA2; EMA; Electron Transfer Flavoprotein Subunit Alpha, Mitochondrial; Multiple Acyl-CoA Dehydrogenase Deficiency; Glutaric Aciduria II; Alpha-ETF; Electron-Transfer-Flavoprotein, Alpha Polypeptide; Electron Transfer Flavoprotein, Alpha Polypeptide; Electron Transfer Flavoprotein Alpha Subunit; Epididymis Secretory Sperm Binding Protein.
Calculated MW	Calculated MW: 35 kDa; Observed MW: 30 kDa
Uniprot ID	P13804
Gene ID	2108
Background	ETFA participates in catalyzing the initial step of the mitochondrial fatty acid beta-oxidation. It shuttles electrons between primary flavoprotein dehydrogenases and the membrane-bound electron transfer flavoprotein ubiquinone oxidoreductase. Defects in electron-transfer-flavoprotein have been implicated in type II glutaricaciduria in which multiple acyl-CoA dehydrogenase deficiencies result in large excretion of glutaric, lactic, ethylmalonic, butyric, isobutyric, 2-methyl-butyric, and isovaleric acids. Two transcript variants encoding different isoforms have been found for this gene.



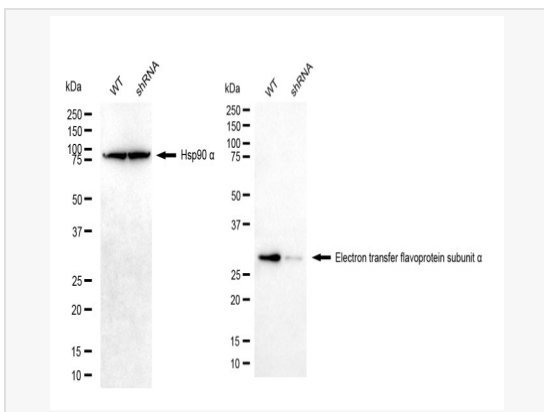
Flow cytometric analysis of Electron transfer flavoprotein subunit alpha expression in HepG2 cells using Electron transfer flavoprotein subunit alpha antibody (M020720, 1:2,000). Green, isotype control; red, Electron transfer flavoprotein subunit alpha.



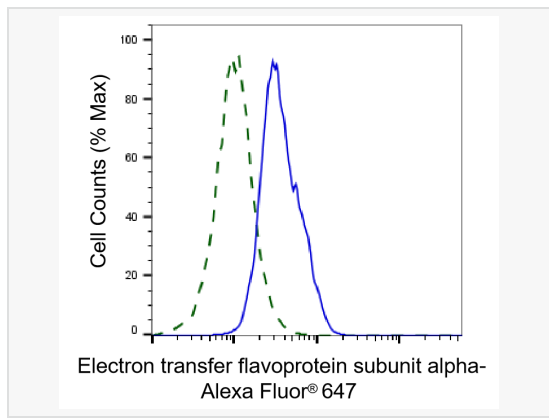
Immunocytochemical staining of HepG2 cells with Electron transfer flavoprotein subunit alpha antibody (M020720, 1:1,000). Nuclei were stained blue with DAPI; Electron transfer flavoprotein subunit alpha was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and Smart Gain: High. Scale bar, 20  $\mu$ m.



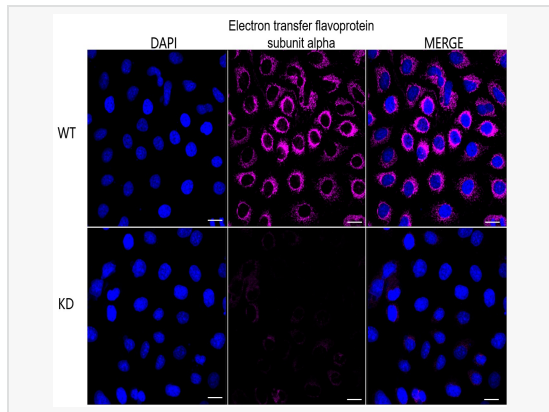
Western blotting analysis using electron transfer flavoprotein subunit alpha antibody (M020720). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with electron transfer flavoprotein subunit alpha antibody (M020720, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using electron transfer flavoprotein subunit alpha antibody (M020720). Electron transfer flavoprotein subunit alpha expression in wild type (WT) and electron transfer flavoprotein subunit alpha (ETFA) shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with electron transfer flavoprotein subunit alpha antibody (M020720, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Validation of Electron transfer flavoprotein subunit alpha knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Electron transfer flavoprotein subunit alpha antibody (M020720, 1:2,000) and analyzed using BD flow cytometer.



Immunocytochemical staining of HeLa cells using Electron transfer flavoprotein subunit alpha antibody (M020720, 1:1,000), Top panel: wild-type (WT); Bottom panel: Adiponectin receptor 1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; Electron transfer flavoprotein subunit alpha was stained magenta with Alexa Fluor® 647. Scale bar, 20  $\mu$ m. Permeabilization: Triton.