fumarate hydratase (J-13): sc-100743

**BACKGROUND**

Fumarate hydratase, a ubiquitously expressed mitochondrial enzyme, catalyses the reversible hydration of fumaric acid to yield l-malic acid during the Krebs cycle. Germline mutations in the fumarate hydratase gene cause a predisposition to renal defects such as multiple cutaneous and uterine leiomyoma (MCL) syndrome. Furthermore, mutations also correlate with renal and smooth muscle tumors, but not with prostate cancer. Additionally, like other metabolic diseases, fumarate hydratase deficiency correlates with seizures, due to prenatal brain dysgenesis.

**CHROMOSOMAL LOCATION**

Genetic locus: FH (human) mapping to 1q43.

**SOURCE**

fumarate hydratase (J-13) is a mouse monoclonal antibody raised against recombinant fumarate hydratase of human origin.

**PRODUCT**

Each vial contains 100 μg IgG κ Kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

fumarate hydratase (J-13) is recommended for detection of precursor mitochondrial and cytoplasmic mature chains of fumarate hydratase of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation (1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for fumarate hydratase siRNA (h): sc-105377, fumarate hydratase shRNA Plasmid (h): sc-105377-SH and fumarate hydratase shRNA (h) Lentiviral Particles: sc-105377-V.

Molecular Weight of fumarate hydratase: 46 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

fumarate hydratase (J-13): sc-100743. Western blot analysis of fumarate hydratase expression in Hela whole cell lysate.


**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

For research use only, not for use in diagnostic procedures.