

**TECHNICAL DATA SHEET****Catalog # MSX32****MetaPath™ Fatty Acid Oxidation 4-Plex Dipstick Array**

Rev.2

LOT #:

**APPLICATIONS:**

Quantitative analysis of SCHAD, MCAD, and TFP. For measuring (i) the expression of these proteins in diseases of fatty acid oxidation and (iii) expression of frataxin the cause of Friedreich's ataxia.

**SPECIES CROSS-REACTIVITY:**

Human

**KIT COMPONENTS:**

Item	Kit MSX32-30	Kit MSX32-90
Dipsticks	30	90
Gold-conjugated antibody (dried in microplate wells)	30 wells	90 wells
Buffer A (Extraction buffer)	15 mL	45 mL
Buffer B (Blocking solution)	1 mL	3 mL
Buffer C (Wash buffer)	2 mL	6 mL

**STORAGE CONDITIONS:**

Store dipsticks and gold-conjugated antibody in their provided storage containers at room temperature, out of direct sunlight. Store Buffers A, B, and C at 4°C or at -20°C for long term storage.

**COUNTRY OF ORIGIN:**

USA

**BACKGROUND:**

The MetaPath™ Fatty Acid Oxidation 4-Plex Dipstick Array (MSX32) is a rapid and simple test for determining four mitochondrial protein parameters: The key fatty acid oxidation acyl dehydrogenase enzymes SCHAD (short chain hydroxyacyl CoA dehydrogenase), MCAD (medium chain acyl CoA dehydrogenase), and the TFP (trifunctional protein). The kit determines whether these enzymes have been up-regulated or down-regulated in human samples as a result of drug interactions or conditions such as oxidative stress and genetic disease. The kit also measures the levels of a key mitochondrial iron regulatory protein frataxin.

Each of the dipsticks in the kit contains an anti-SCHAD antibody (mAb), anti-MCAD mAb, and an anti-TFP mAb for identifying specific defects in these three enzymes which cause fatty acid oxidation disorders - inborn errors in metabolism. Each dipstick also contains an anti-frataxin mAb which can be used as mitochondrial reference protein to compare against SCHAD, MCAD and TFP. Frataxin deficiency is also the cause of Friedreich's ataxia (FA) the most prevalent inherited ataxia.

**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.