AKR1B10 (aldo-keto reductase family 1 member B10) is also known as aldose reductase-like-1 (ARL-1), small intestine reductase (SI reductase) or aldose reductase-related protein (ARP or hARP). AKR1B10 is found in many tissues but is predominantly expressed in small intestine, colon and adrenal gland. AKR1B10 is an efficient reductase for aliphatic and aromatic aldehydes. It plays a role in steroid metabolism as well as detoxification of aldehydes in digested food, and may be involved in the retinal-retinoic acid signaling pathway. AKR1B10 is prominently overexpressed in non-small cell lung carcinoma and adenocarcinoma. Cigarette smoking is an independent variable responsible for this overexpression. AKR1B10 may play a role regulating cell proliferation and cellular response to carbonyl stress.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: AKR1B10 (human) mapping to 7q33.

SOURCE
AKR1B10 (F-4) is a mouse monoclonal antibody raised against amino acids 79-147 mapping within an internal region of AKR1B10 of human origin.

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

PRODUCT
Each vial contains 200 µg IgG₂b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
AKR1B10 (F-4) is recommended for detection of AKR1B10 of human origin by Western Blotting (starting dilution 1:100, 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).

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

DATA
AKR1B10 (F-4): sc-365689. Western blot analysis of AKR1B10 expression in A549 whole cell lysate.

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