

FAS-detect™ IHC

A Monoclonal Antibody Specific for
Fatty Acid Synthase (FAS)

Specification Sheet

Product No. A-1001

FOR RESEARCH USE ONLY. NOT FOR USE IN
DIAGNOSTIC PROCEDURES.

IF PRODUCT IS INTENDED FOR ASSAY
DEVELOPMENT OR OTHER COMMERCIAL
APPLICATIONS, LICENSE RESTRICTIONS MAY
APPLY. FOR ADDITIONAL INFORMATION,
CONTACT FASgen Diagnostics, LLC

Background/Description:

Fatty Acid Synthase (FAS) is an enzyme with cytoplasmic distribution that plays a central role in the de novo biosynthesis of fatty acids (1). FAS expression has also been observed in a wide variety of tumors. Using immunohistochemical techniques, elevated levels of FAS has been reported in most common human carcinomas, including breast (2,3), colon (4), prostate (5,6), and endometrial(7) carcinomas.

FAS-detect™ IHC is a highly specific, monoclonal reagent that can be used to identify FAS in a variety of formalin-fixed, paraffin-embedded tissues using standard antigen retrieval and staining technologies (Figures 1).

Clone: 6E7

Immunogen: FAS purified from ZR-75-1 cell line

Isotype: IgG₁ kappa

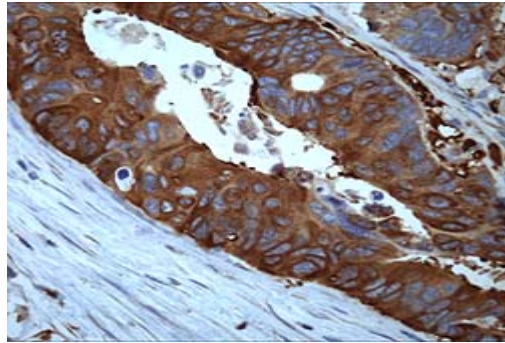
Format: Lyophilized, 50 ug 6E7 in PBS containing 0.5% bovine serum albumin. Reconstitute with 1 ml distilled or deionized water.

Use Dilution: Application dependent/end-user determined.

Preservative: 0.1% sodium azide. CAUTION: Upon disposal, flush reagents with large volumes of water to avoid build-up in plumbing. Sodium azide accumulations may react with lead and cooper plumbing to form explosive metal oxides.

Storage: 4° C

Figure 1: Immunohistochemical staining of FAS in colon cancer using FAS-detect™ IHC (original magnification 400x).



Bibliography:

1. Wakil, S. Fatty acid synthase, a proficient multifunctional enzyme. *Biochemistry* 28: 4523-4530, 1989.
2. Alo, P.L., Visca, P., Marci, A., Mangoni, A., Botti, C., and Di Tondo, U. Expression of fatty acid synthase(FAS) as a predictor of recurrence in stage I breast carcinoma patients. *Cancer* 77: 474-482, 1996.
3. Alo, P., Visca, P., Trombetta, G., Mangoni, A., Lenti, L., Monaco, S., Botti, C., Serpieri, D.E., and Di Tondo, U. Fatty acid synthase (FAS) predictive strength in poorly differentiated early breast carcinomas. *Tumori* 85: 35-40, 1999.
4. Rashid, A., Pizer, E.S., Moga, M., Milgraum, L.Z., Zahurak, M., Pasternack, G.R., Kuhajda, F.P., and Hamilton, S.R. Elevated expression of fatty acid synthase and fatty acid synthetic activity in colorectal neoplasia. *Am. J. Pathol.* 150: 201-208, 1997.
5. Epstein, J.I., Carmichael, M., and Partin, A.W. OA-519 (fatty acid synthase) as an independent predictor of pathologic state in adenocarcinoma of the prostate. *Urology* 45: 81-86, 1995.
6. Swinnen, J.V., Roskams, T., Joniau, S., Van Poppel, H., Oyen, R., Baert, L., Heyns, W., and Verhoeven, G. Overexpression of fatty acid synthase is an early and common event in the development of prostate cancer. *Int. J. Cancer* 98: 10-22, 2002.
7. Pizer, E.S., Lax, S.F., Kuhajda, F.P., Pasternack, G.R., and Kurman, R. Fatty acid synthase expression in endometrial carcinoma: correlation with cell proliferation and hormone receptors. *Cancer* 83: 528-537, 1998.



UMB BioResearch Park, Bldg One
800 W. Baltimore Street, Suite 150
Baltimore, MD 21201
(410) 558-9200(p) • (410) 558-9300(f)