



DB042: FASL (A19)

Background:

FAS/APO-1 (CD95) is an important member of the tumor necrosis factor (TNF) superfamily involved in membrane-mediated apoptosis. Ligation of Fas by FAS ligand or an anti-FAS cross-linking antibody, triggers activation of the caspase cascade (1). Functional impairment of the FAS/FAS-L system is associated with the development and progression of malignancies (2). FAS gene mutations have been suggested to have a role in testicular germ cell tumors (3). Tumor cells frequently exhibit de novo expression of FAS-ligand (FAS-L), which plays a significant role in local tissue destruction, metastatic spread, and immune escape of the tumor cells (8). The apoptosis of lymphocytes, which occurs in autoimmune diseases, is usually induced by the FAS/FAS-ligand system (7). FAS is believed to be involved in various autoimmune diseases including, ulcerative colitis, Graves disease, and rheumatoid arthritis (5,7). FAS expression on gastric epithelial cells in patients infected with H. Pylori is responsible for the accelerated apoptosis of the cells (4). Serum FAS-L concentration has also been shown to be associated with atherosclerosis and inflammatory disease, in patients with hypertension (6).

Origin:

FAS-L (A19) is provided as an affinity purified rabbit polyclonal antibody, raised against a peptide mapping to the amino terminus of rat FAS-L (A19).

Product Details:

Each vial contains 200 µg/ml of affinity purified rabbit IgG FAS-L (A19) DB042, in 1 ml PBS containing 0.1% sodium azide and 0.2% gelatin.

Competition Studies:

A blocking peptide is also available, DB042P, for use in competition studies. Each vial contains 100 µg of peptide in 0.5 ml PBS with 0.1% sodium azide and 100 µg BSA.

Specificity:

FAS-L (A19) DB042 reacts with FAS-L of mouse, rat, and human origin by western blotting and IHC. Western blotting starting dilution 1:200.

Storage:

Store this product at 4° C, do not freeze. The product is stable for one year from the date of shipment.

References:

1. Lin P, Bush JA, Cheung KJ Jr, Li G. Tissue-specific regulation of Fas/APO-1/CD95 expression by p53. *Int J Oncol* 2002 Aug;21(2):261-4.
2. Redondo P, Solano T, VAzquez B, Bauza A, Idoate M. Fas and Fas ligand: expression and soluble circulating levels in cutaneous malignant melanoma. *Br J Dermatol* 2002 Jul;147(1):80-6
3. Takayama H, Takakuwa T, Tsujimoto Y, Tani Y, Nonomura N, Okuyama A, Nagata S, Aozasa K. Frequent fas gene mutations in testicular germ cell tumors. *Am J Pathology* 2002 Aug; 161(2):635-41.
4. Hasumi K, Tanaka K, Saitoh S, Takagi A, Miwa T, Mine T, Koga Y. Roles of tumor necrosis factor-alpha-receptor type 1 and Fas in the Helicobacter pylori-induced apoptosis of gastric epithelial cells. *J Gastroenterol Hepatol* 2002 Jun;17(6):651-658.
5. Yukawa M, Iizuka M, Horie Y, Yoneyama K, Shirasaka T, Itou H, Komatsu M, Fukushima T, Watanabe S. Systemic and local evidence of increased Fas-mediated apoptosis in ulcerative colitis. *Int J Colorectal Dis* 2002 Mar;17(2):70-6
6. Okura T, Watanabe S, Jiang Y, Nakamura M, Takata Y, Yang ZH, Kohara K, Kitami Y, Hiwada K. Soluble Fas ligand and atherosclerosis in hypertensive patients. *J Hypertens* 2002 May;20(5):895-8
7. Hara H, Sato R, Ban Y. Accelerated production of nucleosome in cultured human mononuclear cells in untreated Graves' disease. *Endocr J* 2002 Apr;49(2):189-94
8. Reichmann E. The biological role of the Fas/FasL system during tumor formation and progression. *Semin Cancer Biol* 2002 Aug;12(4):309-15

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