

LFG Antibody

LFG: Lifeguard, Fas apoptotic inhibitory molecule2, FAIM2, NMP35

CATALOG No.:2285

BACKGROUND:

Programmed cell death regulates a number of biological processes such as normal organism development, tissue homeostasis, and removal of damaged cells. Disruption of this process has been implicated in a variety of diseases such as cancer (reviewed in 1). LFG is a recently identified protein that can inhibit the apoptotic signal transduced by the Fas receptor but not from the related tumor necrosis factor- α death signal (2). In this respect, LFG is functionally similar to the anti-apoptotic proteins FAIM, FLIP and Bcl-xL (3). LFG, a seven membrane spanning protein, can bind the Fas receptor but does not regulate Fas expression or inhibit binding of FADD to Fas. LFG is widely distributed, but highly expressed in the hippocampus and other neural tissues. LFG was also identified as the neural membrane protein 35 (NMP35) (4) and its expression is known to be regulated by the Phosphatidylinositol 3-kinase-Akt/PKB pathway (5).

SOURCE:

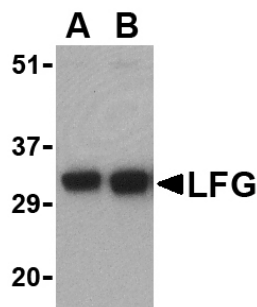
Rabbit polyclonal LFG antibody was raised against a 16 amino acid peptide from near the amino terminus of human LFG (GenBank accession no. AAF06327).

APPLICATION:

LFG antibody can be used for detection of LFG by Western blot at 0.5 – 1 μ g/ml. (Optimal dilution should be determined by user.) EL4 cell lysate can be used as positive control. LFG antibody is human, mouse and rat reactive. **For research use only.**

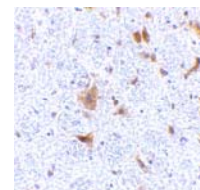
STORAGE:

LFG antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of LFG in EL4 cell lysate with LFG antibody at (A) 0.5 and (B) 1 μ g/ml.

Immunohistochemistry of LFG in mouse brain tissue with LFG antibody at 5 μ g/ml.



RELATED PRODUCTS:

Blocking Peptide, Catalog No. **2285P**.

EL4 Cell Lysate, Catalog No. **1287**.

FAIM Antibody, Catalog No. **2309**.

FLIP Antibody (NT), Catalog No. **1159**.

NGFR Antibody, Catalog No. **3593**.

REFERENCES:

1. Lockshin RA, Osborne B, and Zakeri Z. Cell death in the third millennium. *Cell Death Differ.* 2000; 7:2-7.
2. Somia NV, Schmitt MJ, Vetter DE, et al. LFG: an anti-apoptotic gene that provides protection from Fas-mediated cell death. *Proc. Natl. Acad. Sci. USA* 1999; 96:12667-72.
3. Schneider TJ, Fischer GM, Donohoe TJ, et al. A novel gene coding for a Fas apoptosis inhibitory molecule (FAIM) isolated from inducibly Fas-resistant B lymphocytes. *J. Exp. Med.* 1999; 189:949-55.
4. Schweitzer B, Taylor V, Welcher AA, et al. Neural membrane protein 35 (NMP35): a novel member of a gene family which is highly expressed in the adult nervous system. *Mol. Cell. Neurosci.* 1998; 11:260-73.
5. Beier CP, Wischhusen J, Gleichman M, et al. FasL (CD95L/APO-1L) resistance of neurons mediated by phosphatidylinositol 3-kinase-Akt/protein kinase B-dependent expression of lifeguard/neuronal membrane protein 35. *J. Neurosci.* 2005; 25:6765-74. (08-01D)