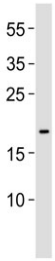
EFNA1 Antibody / Ephrin A1 (F55127)

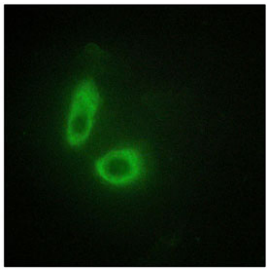
Catalog No.	Formulation	Size
F55127-0.1ML	In 1X PBS, pH 7.4, with 0.09% sodium azide and 50% glycerol	0.1 ml

Bulk quote request

Availability	1-2 business days
Species Reactivity	Human
Format	Purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
UniProt	P20827
Applications	Western Blot : 1:500-1:1000 Immunofluorescence : 1:50-1:100
Limitations	This EFNA1 antibody is available for research use only.



Western blot testing of human MCF7 cell lysate with EFNA1 antibody. Predicted molecular weight ~24 kDa, 21 kDa (two isoforms).



Immunofluorescent staining of fixed and permeabilized human HeLa cells with EFNA1 antibody (green).

Description

Ephrin A1 is a membrane-bound protein that interacts with Eph receptors on neighboring cells, initiating a cascade of signals that regulate cell behavior and movement. This interaction is essential for processes such as cell migration, tissue

organization, and synaptic connectivity in the nervous system. Studies have shown that dysregulation of Ephrin A1 signaling can lead to aberrant cell growth, invasion, and metastasis in cancer cells, highlighting its importance in disease progression. One of the key features of Ephrin A1 is its ability to both attract and repel cells, depending on the context and concentration of the molecule. This dual role allows Ephrin A1 to fine-tune cell-cell interactions and ensure proper tissue patterning during development. In the brain, for example, Ephrin A1 guides axonal growth and synapse formation, shaping the intricate neural circuits that underlie cognitive functions. In addition to its role in development, Ephrin A1 has also been implicated in several disease processes. Aberrant expression of EFNA1 has been observed in various types of cancer, including breast, lung, and colon cancer, where it promotes tumor growth and invasion. In neurodegenerative disorders such as Alzheimer's disease, dysregulation of Ephrin A1 signaling disrupts synaptic connectivity and contributes to cognitive decline.

Application Notes

The stated application concentrations are suggested starting points. Titration of the EFNA1 antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 83-115 from the human protein was used as the immunogen for the EFNA1 antibody.

Storage

Store the EFNA1 antibody at -20oC.