

Product Data Sheet

Product Name: immunoglobulin light chain variable region fragment [Homo sapiens]
 Cat. No.: GP10100

Chemical Properties

Cas. No.

SMILES NC(C(NC(C(C)O)C(NC(CC(C)C)C(NC(CCCCN)C(NC(C(C)CC)C(NC(CO)C(NC(CCCNC(N)=N)C(O)=O)=O)=O)=O)=O)CC1=CC=CC

Formula C₄₀H₆₉N₁₁O₁₀

M.Wt

864.04

Solubility ≥ 86.4mg/mL in DMSO

Storage

Store at -20°C

General For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be tips stored below -20°C for several months.

Shipping Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.
 Condition

Structure

Background

Immunoglobulin light chain variable region fragment [Homo sapiens] is a fragment (Phe-Thr-Leu-Lys-Ile-Ser-Arg) on the variable region of the human immunoglobulin light chain.

Immunoglobulins (Ig) are the antigen recognition molecules of B cells. An Ig molecule is made up of 2 identical heavy chains and 2 identical light chains joined by disulfide bonds so that each heavy chain is linked to a light chain and the 2 heavy chains are linked together. On each of the light chain, there is one variable region and a constant region. The variable region is the most important for binding to antigens.

The antigen combining site of an antibody is made up of the variable regions of one light chain and one heavy chain. Within the variable regions, typically comprising 105-110 amino acids, some positions show more sequence variation than others. The variable fragments are the smallest fragment made from enzymatic cleavage of IgG and IgM class antibodies.

References:

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3. Mattu T, Pleass R, Willis A, Kilian M, Wormald M, Lellouch A, Rudd P, Woof J, Dwek R (1998). "The glycosylation and structure of human serum IgA1, Fab, and Fc regions and the role of N-glycosylation on Fc alpha receptor interactions". J Biol Chem 273 (4): 2260-72. doi:10.1074/jbc.273.4.2260. PMID 9442070.
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6. Putnam FW, Liu YS, Low TL (1979). "Primary structure of a human IgA1 immunoglobulin. IV. Streptococcal IgA1 protease, digestion, Fab and Fc fragments, and the complete amino acid sequence of the alpha 1 heavy chain". J Biol Chem 254 (8): 2865-74. PMID 107164.
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Caution: Product has not been fully validated for medical applications. For research use only.

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