

D-Dimer (DD1): sc-51859

BACKGROUND

Fibrinogen, the main protein of the blood coagulation system, becomes activated into fibrin by thrombin and fibrin polymerization during the process of blood coagulation. Plasmin then digests the fibrin clot and fibrin degradation products of different molecular weights are released into the bloodstream. D-dimer is the main and smallest product of fibrin degradation, comprised of 111-197 amino acids in the α -chain, 134-461 amino acids in the β -chain, and 88-406 amino acids in the γ -chain of fibrinogen. All chains are cross-linked by disulfide bonds, and the dimeric structure is held by two isopeptide bonds between C-terminal parts of γ -chains. D-dimer fragments can be measured easily in plasma and whole blood, and the presence or absence of D-dimer may be useful in the diagnostic evaluation of venous thromboembolism.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FGA (human) mapping to 4q32.1.

SOURCE

D-Dimer (DD1) is a mouse monoclonal antibody raised against homogenized fibrin clot of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

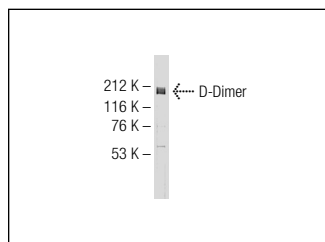
For research use only, not for use in diagnostic procedures.

APPLICATIONS

D-Dimer (DD1) is recommended for detection of D-Dimer and high molecular weight fibrin degradation products of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Molecular Weight of D-Dimer: 180 kDa.

DATA



D-Dimer (DD1): sc-51859. Western blot analysis of D-Dimer derived from human plasma.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.