

Product Name

Deiminated human Fibrinogen (huPAD4)

CAT No.

MQ 21.102-100

LOT No.

BM21.102-0215-12

Quantity

100 µg

Edition: February 1, 2012

Intended use

This product is for research use only. NOT for use in diagnostic or therapeutic procedures.

This product is intended for use in enzyme-linked immunosorbent assay (ELISA), immunoblotting (IB), immunoprecipitation (IP).

Reagent provided

Human fibrinogen: 35-65% protein (~95% of the protein is clottable). Sigma-Aldrich, F4883.

Fibrinogen has been deiminated in vitro with recombinant human Peptidyl Arginine Deminase 4 (PAD4; MQ16.203). The deiminated fibrinogen is supplied in 0.1 M Tris-HCl pH 7.2, 10 mM CaCl₂, 5 mM DTT at a concentration of 1mg/1ml.

Precautions

1. For professional users.
2. As with any product derived from biological sources, proper handling procedures should be used.
3. The product may be used in different techniques and in combination with different sample types and materials, therefore each individual laboratory should validate the applied test system.

Storage instructions

Store at -80°C. Repeated freeze/thaw cycles are not recommended.

Dilution guidelines

ELISA: 300ng/well of a 96-well high absorbance ELISA plate (Figure 1).

Other applications: since applications vary, you should determine the optimum working dilution of the product that is appropriate for your specific need.

Relevance

Fibrinogen is a protein produced by the liver which helps stop bleeding by blood clot formation.

Citrulline, while being an amino acid, is not built into proteins during protein synthesis, as it is not coded for by DNA, yet several proteins are known to contain citrulline. Proteins that normally contain citrulline residues include myelin basic protein (MBP), filaggrin, and several histone proteins, while other proteins, like fibrinogen and vimentin can get deiminated during cell death and tissue inflammation (1).

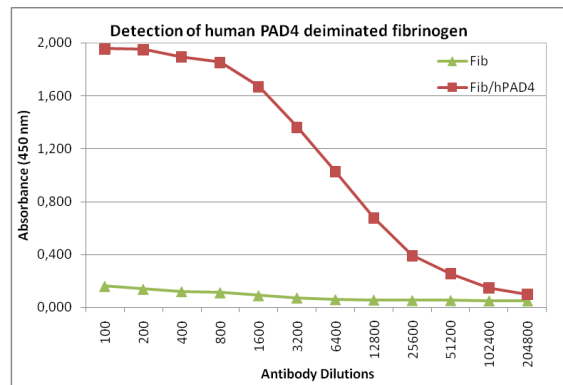


Figure 1:
human recombinant PAD4 deiminated fibrinogen (Fib/hPAD4) and non deiminated fibrinogen (Fib) has been coated on a 96-well ELISA plate (0,3µg/well). To detect deimination, a proprietary anti-deiminated fibrinogen antibody (MQ13.102) has been used and diluted from a stock solution of 0,5mg/ml.

Related products:

1. Deiminated human fibrinogen (huPAD2) (MQ21.101)
2. Anti-citrullinated fibrinogen (MQR2.101)
3. Anti-citrullinated fibrinogen (MQ13.101)
4. Anti-citrullinated fibrinogen (MQ13.102)
5. Anti-citrullinated fibrinogen (MQ13.103)
6. Anti-citrullinated fibrinogen (MQ13.104)
7. Recombinant human PAD2 enzyme (MQ16.201)
8. Recombinant human PAD4 enzyme (MQ16.203)
9. Recombinant mouse PAD4 enzyme (MQ16.103)
10. PAD enzyme activity assay (MQ17.101)