



# Human Factor D (DAG4677)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Product Overview</b>	Human Factor D
<b>Antigen Description</b>	Factor D is a glycosylated protein composed of a single 24,000 Da polypeptide chain. It is an essential component of the alternative pathway of complement activation. Its only known function is to cleave and activate factor B when factor B is bound to C3b
<b>Species</b>	Human
<b>Purity</b>	> 95% by SDS-PAGE
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	The alternative pathway cannot activate without factor D and much pathological damage is done by primary or secondary activation of the alternative pathway of complement. Therefore, pharmaceutical companies have investigated various drugs to inhibit it. Due to the distorted active site, except when bound to its substrate, effective small molecule inhibitors have not yet been found. However, humanized anti-factor D is under investigation and has the advantage that very low plasma concentration of factor D requires little antibody.
<b>Format</b>	Frozen liquid
<b>Concentration</b>	0.1 mg/ml (see Certificate of Analysis for actual concentration)
<b>Buffer</b>	10 mM sodium phosphate, 145 mM NaCl, pH 7.3
<b>Preservative</b>	None
<b>Storage</b>	2-8°C short term, -20°C long term

## BACKGROUND

**Introduction**

The protein encoded by this gene is a member of the trypsin family of peptidases. The encoded protein is a component of the alternative complement pathway best known for its role in humoral suppression of infectious agents. This protein is also a serine protease that is secreted by adipocytes into the bloodstream. Finally, the encoded protein has a high level of expression in fat, suggesting a role for adipose tissue in immune system biology.

**Keywords**

CFD; complement factor D (adipsin); D component of complement (adipsin) , DF, PFD, properdin factor D; complement factor D; ADN; properdin factor D; C3 convertase activator; complement factor D preproprotein; D component of complement (adipsin); DF; PFD;