

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Complement Factor D in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant mouse Complement Factor D is observed, and less than 1% cross-reactivity with recombinant human (rh) Complement Factor B and rhComplement Factor I is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Complement Factor D Ile26-Ala253 Accession # P00746
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human Complement Factor D/Adipsin (Catalog # <a href="#">1824-SE</a> )
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Complement Factor D/Adipsin (Catalog # <a href="#">1824-SE</a> ), <a href="#">see our available Western blot detection antibodies</a>

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

Complement Factor D is a serine protease that catalyzes the initial proteolytic step in the alternative pathway of complement. Expressed in adipose tissue at high levels, factor D is also known as adipsin (1). It is an exceptionally specific protease and the only known protein substrate is factor B in complex with C3 (2). Factor D protease activity is regulated by reversible conformational changes, which differs from the majority of serine proteases whose regulation involves either activation by processing of the zymogens or inactivation by binding of the inhibitors. Compared to its physiologically important proteolytic activity, factor D has much lower activity toward synthetic peptide substrates. However, thioester substrates have been routinely used for assessing factor D activity (3).

## References:

1. White, R.T. *et al.* (1992) J. Biol. Chem. **267**:9210.
2. Taylor, F.R. *et al.* (1999) Biochemistry **38**:2849.
3. Kim, S. *et al.* (1995) J. Biol. Chem. **270**:24399.