

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Complement Component C2 in direct ELISAs and Western blots. In direct ELISAs, less than 10% cross-reactivity with recombinant mouse Complement Component C2 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 Component C2 Ala21-Leu752 Accession # P06681
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## 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 Component C2 (Catalog # <a href="#">1936-SE</a> )
<b>Immunoprecipitation</b>	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Complement Component C2 (Catalog # <a href="#">1936-SE</a> ), see our available <a href="#">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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<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

The classical complement pathway plays a major role in innate immunity against infection. This pathway is triggered by C1, a multimolecular complex composed of the recognition protein C1q and two serine proteases, C1r and C1s (1). After activation by C1, the single-chain form of C2 (amino acid residues 21-752) becomes two chains, which are referred to as C2A and C2B. C2A (residues 244-752) consists of a vWF domain (residues 254-452) and a serine protease domain (residues 466-752). C2B (residues 21-243) contains 3 Sushi (SCR) domains. C2A, then combines with complement factor 4B to generate the C3 or C5 convertase. The full-length of human C2 was expressed, and the purified protein corresponded to the single-chain form with the peptidase activity.

### References:

1. Arlaud, G.J. *et al.* (2002) *Biochem. Soc. Trans.* **30**:1001.