

PRODUCT DATASHEET

CRP Canine HEK293 Tag free

Cat. No.: RD472586100

Type: Recombinant protein

Size: 0.1 mg

Source: HEK293

Species: Canine

Description

Total 204 AA. MW: 23.2 kDa (calculated). NCBI Reference Sequence: NP_001301045.1. Protein identity confirmed by LC-MS/MS.

Other names

C-Reactive Protein

Introduction to the molecule

CRP is an acute-phase protein, produced exclusively in the liver. Serum concentration of CRP increases significantly in cases of both infectious and noninfectious inflammation, of tissue damage and necrosis and in the presence of malignant tumours. CRP is present in the active stages of inflammatory disorders like rheumatoid arthritis, ankylosing spondylitis, Reiter's syndrome, psoriatic arthropathy, systemic lupus erythematosus, polyarteritis, ulcerative colitis and Crohn's disease. The CRP level increases dramatically following microbial infections, and this can be particularly helpful for the diagnosis and monitoring of bacterial septicemia in neonates and other immunocompromised patients at risk.

Research topic

Animal studies, Immune Response, Infection and Inflammation, Sepsis

Amino Acid sequence

QIDLDEKAFV FPRESENSYV ILFPQLQKPM KAFTVCLQVY TDLTRPHSLF SYATKSQSNE ILLFKERPGL FSVSVGGSDA FINFPQKFYA
PQHFCVTWES VTGLTELWVD GKPMVRASLR RGYTVGSGAS IVLGQEQDSF GGGFDKNQSL VGDIEDVNMW DFVLSPSQIL TLYTTRALSP
NVLNWRNLRY ETRGEVFLKK ELWS

Purity

Purity as determined by densitometric image analysis: > 95%

Endotoxin

< 0.1 EU/μg

Formulation:

Filtered (0.4 μm) and lyophilized from 0.5 mg/ml solution in 20 mM Tris buffer, 50 mM NaCl, 1mM CaCl₂, pH 7.5.

Reconstitution:

Add deionized water to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely.

Shipping

At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life

Store lyophilized protein at -80°C . Lyophilized protein remains stable until the expiry date when stored at -80°C . Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at -80°C for long term storage. Reconstituted protein can be stored at 4°C for a week.

Quality control

BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

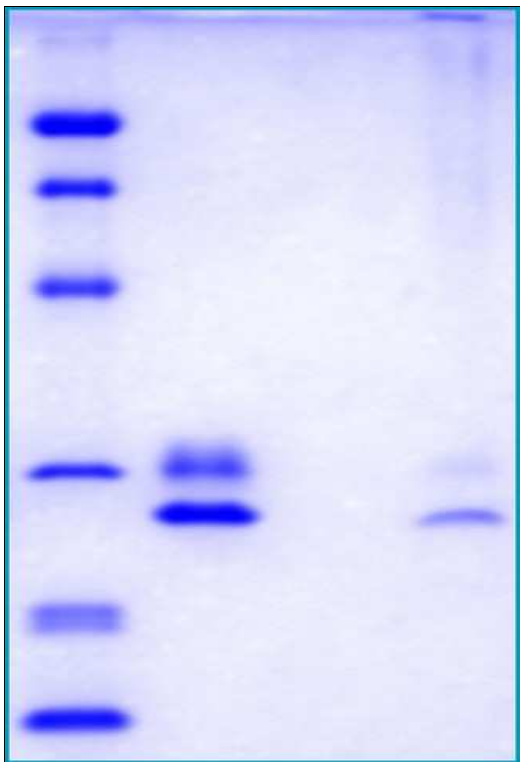
LAL to determine quantity of endotoxin.

Applications

ELISA, Western blotting

Note

This product is intended for research use only.



12 % SDS-PAGE separation of Canine CRP tagless (HEK):

1. M.W. marker – 14, 21, 31, 45, 66, 97 kDa
2. Reduced and boiled sample, 2.5 $\mu\text{g}/\text{lane}$
3. Non-reduced and non-boiled sample, 2.5 $\mu\text{g}/\text{lane}$