R&D SYSTEMS
a bio-techne brand

Recombinant Viral CKBP

Catalog Number: 8254-CK/CF

DESCRIPTION

Source	Human embryonic kidney cell, HEK293-derived Pro18-Val258, with an N-terminal 6-His tag Accession # P19063
N-terminal Sequence Analysis	His
Predicted Molecular Mass	27 kDa

SPECIFICATIONS

SDS-PAGE	36-40 kDa, reducing conditions
Activity	Measured by its ability to inhibit CCL3/MIP-1α-induced chemotaxis of BaF3 mouse pro-B cells transfected with human CCR5. The ED_{50} for this effect is 0.02-0.1 μg/mL.
Endotoxin Level	<0.10 EU per 1 μg of the protein by the LAL method.
Purity	>90%, by SDS-PAGE with silver staining.
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 μg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Chemokine-binding Protein (CKBP), also known as, CKBP-II, vCCI, or B29R, is a 35 kDa secreted protein encoded by multiple poxviruses, including the *Vaccinia* virus (Lister strain) (1). While CKBP binds and sequesters CC chemokines with high affinity, it shares little amino acid sequence identity with CC chemokine receptors (1-3). CKBP prevents CC chemokine activity by masking the chemokine/chemokine receptor binding site (4). Chemokine-binding proteins encoded by poxvirus and herpesvirus strains inhibit the recruitment of immune cells and contribute to viral evasion of host immune responses (5). Local administration of pan-CC chemokine binding proteins such as CKBP have been shown to reduce inflammation resulting from allergic airway hyperactivity and arthritis (6, 7).

References:

1. Alcami, A. *et al.* (1998) J. Immunol. **160**:624.
2. Kuo, N.W. *et al.* (2014) J. Biol. Chem. [In press].
3. Zhang, L. *et al.* (2006) Proc. Natl. Acad. Sci. USA **103**:13985.
4. Beck, C.G. *et al.* (2001) J. Biol. Chem. **276**:43270.
5. Seet, B.T. and G. McFadden (2002) J. Leukoc. Biol. **72**:24.
6. Dabbagh, K. *et al.* (2000) J. Immunol. **165**:3418.
7. Buatois, V. *et al.* (2010) J. Immunol. **185**:2544.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449