Recombinant Human KEAP1 Protein

Catalog No.: RP02850

Sequence Information

Species
Human

Gene ID
9817

Swiss Prot
Q14145

Tags
No tag

Synonyms
INrf2; KLHL19

Product Information

Source
Baculovirus-Insect Cells

Purification
≥ 85 % as determined by SDS-PAGE.

Calculated MW
69.7 kDa

Observed MW
64 kDa

Endotoxin
< 1 EU/μg of the protein by LAL method.

Formulation
Lyophilized from a 0.22 μm filtered solution of 20mM Tris, 500mM NaCl, 3mM DTT, 10% glycerol, pH 7.4.

Reconstitution
Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Background

Kelch-like ECH-associated protein 1, also known as a cytosolic inhibitor of Nrf2, Kelch-like protein 19, KEAP1, and INRF2, is a cytoplasm and nucleus protein that contains one BACK (BTB/Kelch associated) domain, one BTB (POZ) domain, and six Kelch repeats. KEAP1 / INRF2 is broadly expressed, with the highest levels in skeletal muscle. KEAP1 / INRF2 is a key regulator of the NRF2 transcription factor, which transactivates the antioxidant response element (ARE) and upregulates numerous proteins involved in antioxidant defense. Under basal conditions, KEAP1 / INRF2 targets NRF2 for ubiquitination and proteolytic degradation and as such is responsible for the rapid turnover of NRF2. KEAP1 / INRF2 retains NFE2L2 / NRF2 in the cytosol. KEAP1 / INRF2 functions as a substrate adapter protein for the E3 ubiquitin ligase complex formed by CUL3 and RBX1. It targets NFE2L2 / NRF2 for ubiquitination and degradation by the proteasome, thus resulting in the suppression of its transcriptional activity and the repression of antioxidant response element-mediated detoxifying enzyme gene expression. KEAP1 / INRF2 may also retain BPTF in the cytosol. It targets PGAM5 for ubiquitination and degradation by the proteasome.

Basic Information

Description
Recombinant Human KEAP1 Protein is produced by Baculovirus-Insect Cells expression system. The target protein is expressed with sequence (Gln2-Cys624) of human KEAP1 (Accession #NP_036421.2) fused with no additional amino acid.

Activity

Shipping
Lyophilized proteins are shipped at ambient temperature.
Liquid proteins are shipped at frozen temperature with dry ice.
Upon receipt, store it immediately at the temperature recommended below.

Storage
Store at -20℃

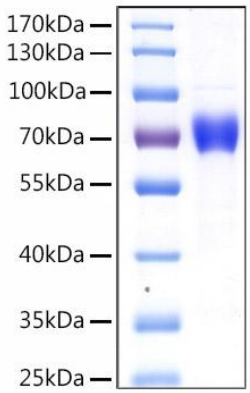
Operational Notes
For your safety and health, please wear a lab coat and disposable gloves for handling.

Contact

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Please visit http://abclonal.com for a complete listing of recommended products.

Validation Data



Recombinant Human KEAP1 Protein was determined by SDS-PAGE under reducing conditions with Coomassie Blue.