

## Instruction manual FOR RESEARCH USE ONLY NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

## Recombinant Human KEAP1 / INRF2 Protein

Cat.NO.: TP08086

3th Edition

Synonyms: INRF2; KEAP-1; KLHL19

**Description:**Kelch-like ECH-associated protein 1, also known as cytosolic inhibitor of Nrf2, Kelch-like protein 19, KEAP1 and INRF2, is a cytoplasm and nucleus protein which contains one BACK (BTB/Kelch associated) domain, one BTB (POZ) domain and six Kelch repeats. KEAP1 / INRF2 is broadly expressed, with 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 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.

Form:PBS

Molecular Weight: 69.7 kDa

Sequences: Gln2-Cys624

Purity:> 95% by HPLC

**Concentration:** 

Endotoxin Level:<1.0 EU per 1 ug of protein (determined by LAL method)

**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

1/1