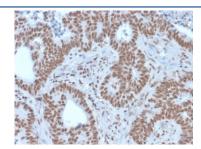


# NRF1 Antibody / Nuclear Respiratory Factor 1 [clone NRF1/2609] (V7983)

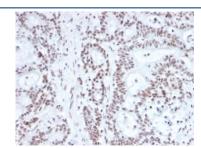
Catalog No.	Formulation	Size
V7983-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	100 ug
V7983-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide	20 ug
V7983SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

## **Bulk quote request**

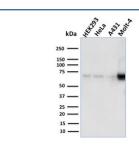
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	NRF1/2609
Purity	Protein G affinity chromatography
UniProt	Q16656
Localization	Nuclear
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This NRF1 antibody is available for research use only.



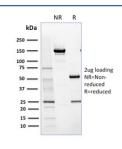
IHC staining of FFPE human colon carcinoma with NRF1 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



IHC staining of FFPE human prostate carcinoma with NRF1 antibody. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



Western blot testing of human samples with NRF1 antibody. Expected molecular weight: isoforms from 45-67 kDa.



SDS-PAGE analysis of purified, BSA-free NRF1 antibody as confirmation of integrity and purity.

## **Description**

The NF-E2 DNA binding protein is composed of two subunits, p45 and MafK, and it regulates expression of globin genes in developing erythroid cells through interaction with Maf recognition elements (MAREs). A family of NF-E2 related proteins, which are collectively known as the Cap 'n' collar (CNC) family and include Nrf1 (also designated TCF11), Nrf2 and Nrf3, are bZIP transcription factors that heterodimerize with Maf proteins to bind MARE sequences. The Nrf proteins also bind the antioxidant response element (ARE) and are implicated in the regulation of detoxification enzymes and the oxidative stress response. They do so by heterodimerizing with Jun family members (c-Jun, JunB and JunD) to activate gene expression, specifically the detoxifying enzyme, NQO1. Nrf2 is widely expressed and is thought to translocate to the nucleus after treatment with xenobiotics and antioxidants, which stimulate its release from a repressor protein Keap1. Nrf3 is highly expressed in placenta, B cells and monocytes.

### **Application Notes**

Optimal dilution of the NRF1 antibody should be determined by the researcher.

#### **Immunogen**

A recombinant full-length human protein was used as the immunogen for this NRF1 antibody.

#### **Storage**

Store the NRF1 antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).