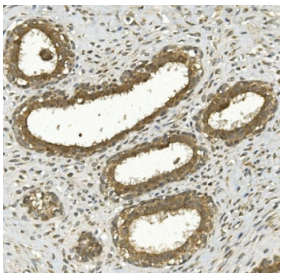
NRF-2 Antibody / NFE2L2 (RQ5744)

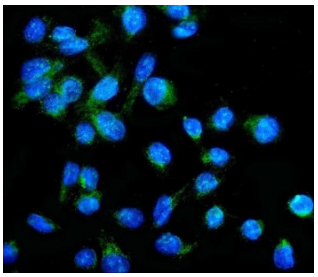
Catalog No.	Formulation	Size
RQ5744	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

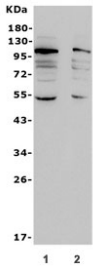
Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose and 0.025% sodium azide
UniProt	Q16236
Applications	Western Blot : 0.5-1ug/ml Immunohistochemistry : 1-2ug/ml Immunofluorescence : 2-4ug/ml Flow Cytometry : 1-3ug/million cells Direct ELISA : 0.1-0.5ug/ml
Limitations	This NRF-2 antibody is available for research use only.



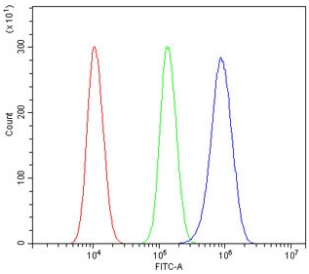
IHC staining of FFPE human breast cancer with NRF-2 antibody. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Immunofluorescent staining of FFPE human U-2 OS cells with NRF-2 antibody (green) and DAPI nuclear stain (blue). HIER: steam section in pH6 citrate buffer for 20 min.



Western blot testing of human 1) HepG2 and 2) SW620 lysate with NRF-2 antibody. Predicted molecular weight ~66 kDa, also observed at 95-110 kDa.



Flow cytometry testing of human 293T cells with NRF-2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= NRF-2 antibody.

Description

NFE2L2 (nuclear factor (erythroid-derived 2)-like 2) also known as NRF2 or NFE2-RELATED TRANSCRIPTION FACTOR 2, is a transcription factor that in humans is encoded by the NFE2L2 gene. NFE2, NFE2L1, and NFE2L2 comprise a family of human genes encoding basic leucine zipper (bZIP) transcription factors. NFE2L2 induces the expression of various genes including those that encode for several antioxidant enzymes, and it may play a physiological role in the regulation of oxidative stress. The NFE2L2 gene is located on 2q31.2. The identification of somatic mutations that disrupt the NRF2-KEAP1 interaction to stabilize NRF2 and increase the constitutive transcription of NRF2 target genes indicated that enhanced reactive oxygen species (ROS) detoxification and additional NRF2 functions may in fact be tumorigenic. Oncogene-directed increased expression of Nrf2 is a mechanism for the activation of the Nrf2 antioxidant program evident in primary cells and tissues of mice expressing KRas(G12D) and BRaf(V619E), and in human pancreatic cancer.

Application Notes

Optimal dilution of the NRF-2 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids R34-N605) was used as the immunogen for the NRF-2 antibody.

Storage

After reconstitution, the NRF-2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.