



# NFE2L2 Monoclonal Antibody

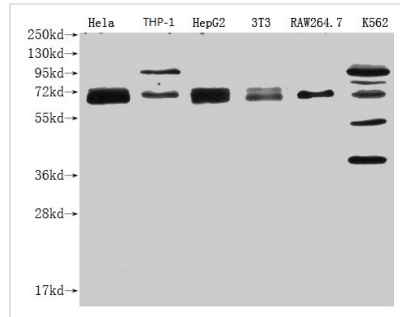
<b>Product Code</b>	CSB-MA614961A0m
<b>Storage</b>	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
<b>Uniprot No.</b>	Q16236
<b>Immunogen</b>	Recombinant Human Nuclear factor erythroid 2-related factor 2 protein (256-605AA)
<b>Raised In</b>	Mouse
<b>Species Reactivity</b>	Human, Mouse
<b>Tested Applications</b>	ELISA, WB, IHC, IF, FC; Recommended dilution: WB?1:1000-1?8000, IHC:1:50-1:200, IF:1:50-1:200, FC:1:50-1:200
<b>Relevance</b>	<p>Transcription factor that plays a key role in the response to oxidative stress: binds to antioxidant response (ARE) elements present in the promoter region of many cytoprotective genes, such as phase 2 detoxifying enzymes, and promotes their expression, thereby neutralizing reactive electrophiles (PubMed:11035812, PubMed:19489739, PubMed:29018201, PubMed:31398338). In normal conditions, ubiquitinated and degraded in the cytoplasm by the BCR(KEAP1) complex (PubMed:11035812, PubMed:15601839, PubMed:29018201). In response to oxidative stress, electrophile metabolites inhibit activity of the BCR(KEAP1) complex, promoting nuclear accumulation of NFE2L2/NRF2, heterodimerization with one of the small Maf proteins and binding to ARE elements of cytoprotective target genes (PubMed:19489739, PubMed:29590092). The NFE2L2/NRF2 pathway is also activated in response to selective autophagy: autophagy promotes interaction between KEAP1 and SQSTM1/p62 and subsequent inactivation of the BCR(KEAP1) complex, leading to NFE2L2/NRF2 nuclear accumulation and expression of cytoprotective genes (PubMed:20452972). May also be involved in the transcriptional activation of genes of the beta-globin cluster by mediating enhancer activity of hypersensitive site 2 of the beta-globin locus control region (PubMed:7937919).</p>
<b>Form</b>	Liquid
<b>Conjugate</b>	Non-conjugated
<b>Storage Buffer</b>	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
<b>Purification Method</b>	>95%, Protein A purified
<b>Isotype</b>	IgG2b
<b>Clonality</b>	Monoclonal
<b>Product Type</b>	Monoclonal Antibody
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Research Area</b>	Signal Transduction


**Target Names**

NFE2L2

**Clone No.**

2F6C6

**Image**

**Western Blot**

Positive WB detected in: NFE2L2 antibody at 1:1000

Lane 1: HeLa whole cell lysate

Lane 2: THP-1 whole cell lysate

Lane 3: HepG2 whole cell lysate

Lane 4: NIH/3T3 whole cell lysate

Lane 5: RAW264.7 whole cell lysate

Lane 6: K562 whole cell lysate

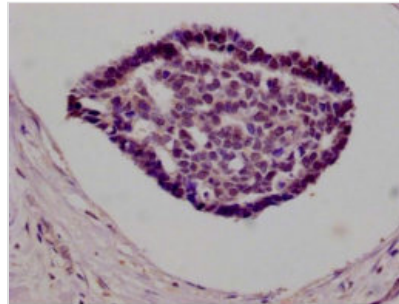
Secondary

Goat polyclonal to Mouse IgG at 1/20000 dilution

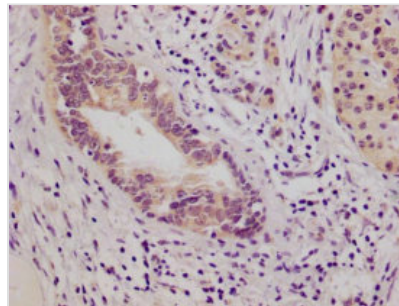
Predicted band size: 68 KDa

Observed band size: 68-100 KDa

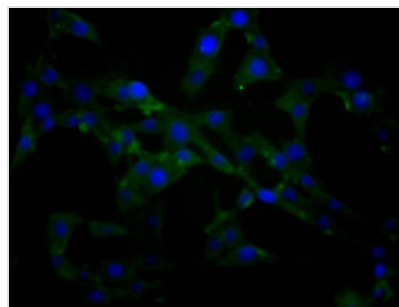
Exposure time: 1min



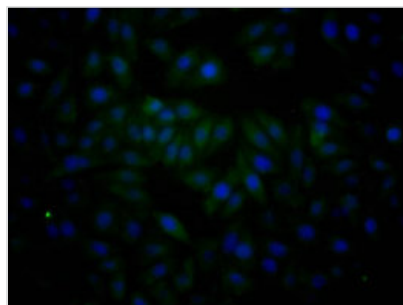
IHC image of CSB-MA614961A0m diluted at 1:100 and staining in paraffin-embedded human breast cancer tissue performed on a Leica Bond<sup>TM</sup> system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4°C overnight, and detected by a Goat anti-mouse IgG polymer labeled by HRP and visualized using 0.05% DAB.



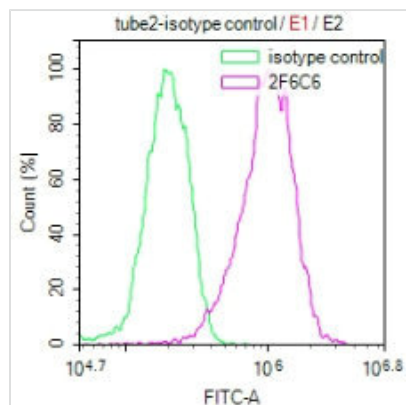
IHC image of CSB-MA614961A0m diluted at 1:100 and staining in paraffin-embedded human pancreatic cancer tissue performed on a Leica Bond<sup>TM</sup> system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at 37°. Then primary antibody (1% BSA) was incubated at 4°C overnight. The primary is detected by a Goat anti-mouse IgG labeled by HRP and visualized using 0.05% DAB.



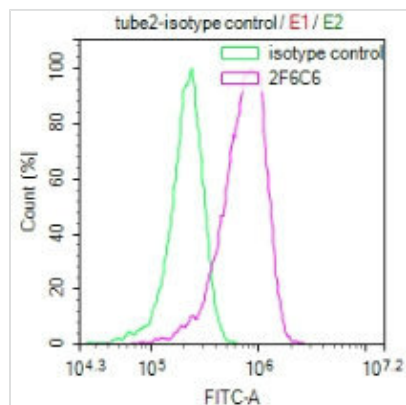
Immunofluorescence staining of NIH/3T3 cells with CSB-MA614961A0m at 1:150, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).



Immunofluorescence staining of HepG2 cells with CSB-MA614961A0m at 1:150, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Mouse IgG (H+L).



Overlay Peak curve showing HeLa cells stained with CSB-MA614961A0m (red line) at 1:100. The cells were incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1µg/1\*10<sup>6</sup>cells) for 1h at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/100 dilution for 30min at 4°C. Isotype control antibody (green line) was mouse IgG1 (1µg/1\*10<sup>6</sup>cells) used under the same conditions. Acquisition of >10,000 events was performed.



Overlay Peak curve showing HepG2 cells stained with CSB-MA614961A0m (red line) at 1:100. The cells were incubated in 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (1µg/1\*10<sup>6</sup>cells) for 1h at 4°C. The secondary antibody used was FITC-conjugated Goat Anti-Mouse IgG(H+L) at 1/100 dilution for 30min at 4°C. Isotype control antibody (green line) was mouse IgG1 (1µg/1\*10<sup>6</sup>cells) used under the same conditions. Acquisition of >10,000 events was performed.

**Usage**

For Research Use Only. Not for use in diagnostic or therapeutic procedures.