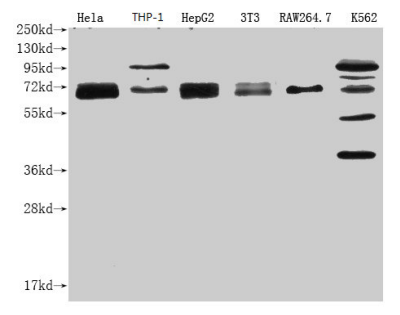
NFE2L2 Monoclonal Antibody

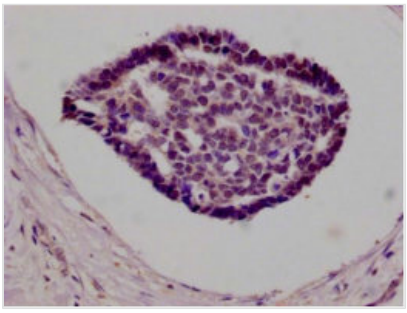
Product Code	CSB-MA614961A0m
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q16236
Immunogen	Recombinant Human Nuclear factor erythroid 2-related factor 2 protein (256-605AA)
Raised In	Mouse
Species Reactivity	Human, Mouse
Tested Applications	ELISA, WB, IHC, IF, FC; Recommended dilution: WB?1:1000-1?8000, IHC:1:50-1:200, IF:1:50-1:200, FC:1:50-1:200
Relevance	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).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Preservative: 0.03% Proclin 300 Constituents: 50% Glycerol, 0.01M PBS, PH 7.4
Purification Method	>95%, Protein A purified
Isotype	IgG2b
Clonality	Monoclonal
Product Type	Monoclonal Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Signal Transduction

Gene Names	NFE2L2
Clone No.	2F6C6

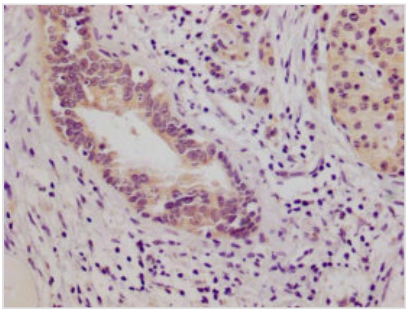
Image



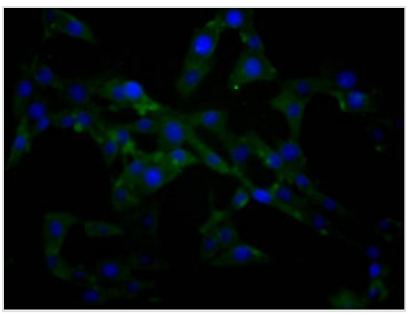
Western Blot
Positive WB detected in: NFE2L2 antibody at 1:1000
Lane 1: Hela whole cell lysate
Lane 2: THP-1 whole cell lysate
Lane 3: HepG2 whole cell lysate
Lane 4: NIH/3T3 whole cell lysate
Lane 5: RAW264.7 whole cell lysate
Lane 6: K562 whole cell lysate
Secondary
Goat polyclonal to Mouse IgG at 1/20000 dilution
Predicted band size: 68 KDa
Observed band size: 68-100 KDa
Exposure time: 1min



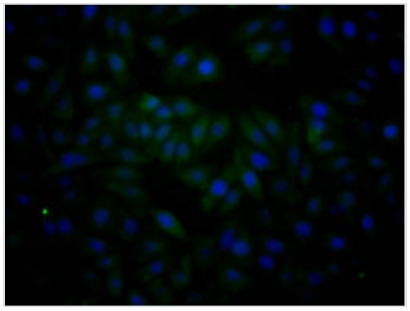
IHC image of CSB-MA614961A0m diluted at 1:100 and staining in paraffin-embedded human breast cancer tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min 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.



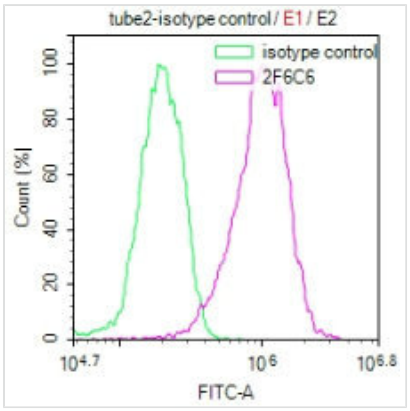
IHC image of CSB-MA614961A0m diluted at 1:100 and staining in paraffin-embedded human pancreatic cancer tissue performed on a Leica BondTM system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 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.



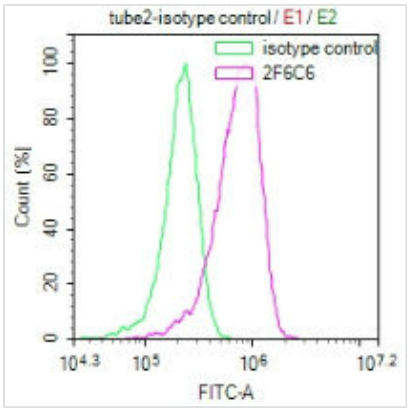
Immunofluorescence staining of NIH/3T3 cells with CSB-MA614961A0m at 1:150, counter-stained with DAPI. The cells were fixed in 4% formaldehyde and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4°C. Nuclear DNA was labeled in blue with DAPI. The secondary 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*106cells) 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*106cells) 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*106cells) 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*106cells) used under the same conditions. Acquisition of >10,000 events was performed.