

Product datasheet for AM06551SU-N

OriGene Technologies, Inc.

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Nac1 (NACC1) Mouse Monoclonal Antibody [Clone ID: 6H2]

Product data:

Product Type: Primary Antibodies

Clone Name: 6H2

Applications: ELISA, IHC, WB **Recommended Dilution: ELISA:** 1/10000.

Western Blot: 1/500 - 1/2000.

Immunohistochemistry on Paraffin Sections: 1/200 - 1/1000.

Reactivity: Human
Host: Mouse
Isotype: IgG1

Clonality: Monoclonal

Immunogen: Purified recombinant fragment of Human NACC1 expressed in E. Coli.

Specificity: Recognizes NACC1

Formulation: State: Ascites

State: Ascitic fluid containing 0.03% Sodium Azide.

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.

Predicted Protein Size: 58 kDa

Gene Name: nucleus accumbens associated 1

Database Link: Entrez Gene 112939 Human

Q96RE7

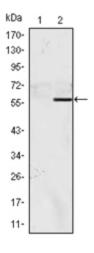


Background:

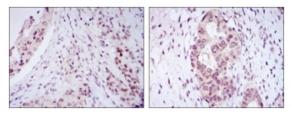
NAC1 or nuclear accumbens-1 is a nuclear factor that belongs to the POZ/BTB (Pox virus and zinc finger/bric-a-brac tramtrack broad complex) domain family. Also known as BTBD14B, it was originally identified in a unique neuronal forebrain structure responsible for reward motivation and addictive behaviors . NAC1 recruits HDAC3 and HDAC4 to transcriptionally repress gene expression in neuronal cells (3) and specifically co-represses other POZ/BTB proteins in the central nervous system. NAC1 is upregulated in several tumor types, including breast, renal cell, and hepatocellular carcinoma, as well as high grade ovarian serous carcinoma, where it has long been suspected as a chemoresistance gene . The chemoresistance mechanism reportedly occurs through NAC1 negative regulation of the GADD45 pathway. NAC1 has also been described as part of the extended transcriptional network in pluripotent cells that involves Oct-4, Sox2, Nanog, Sall1, KLF4 and Sall4. Tissue specificity: Overexpressed in several types of carcinomas including ovarian serous carcinomas. Expression levels positively correlate with tumor recurrence in ovarian serous carcinomas, and intense immunoreactivity in primary ovarian tumors predicts early recurrence. Up-regulated in ovarian carcinomas after chemotherapy, suggesting a role in development of chemotherapy resistance in ovarian cancer.

Synonyms: NAC1

Product images:



Western blot analysis using NACC1 antibody Cat.-No AM06551SU-N against HEK293 (1) and NACC1 (AA: 165-438)-hlgGFc transfected HEK293 (2) cell lysate



Immunohistochemical analysis of paraffinembedded mammary cancer tissues (left) and ovarian cancer tissues (right) using NACC1 antibody Cat.-No AM06551SU-N with DAB staining.