

## Product datasheet for **AR50231PU-S**

### **MAK3 / NAT13 (1-169, His-tag) Human Protein**

#### **Product data:**

|  |   |
|--|---|
| <b>Product Type:</b>                         | Recombinant Proteins  |
| <b>Description:</b>                          | MAK3 / NAT13 (1-169, His-tag) human recombinant protein, 0.1 mg   |
| <b>Species:</b>                              | Human   |
| <b>Expression Host:</b>                      | E. coli   |
| <b>Expression cDNA Clone or AA Sequence:</b> | MGSSHHHHHH SSGLVPRGSH MGSHEMKSRI ELGDVTPHNI KQLKRLNQVI FVSYNDKFY KDVLEVGELA KLAYFNDAIV GAVCCRVDHS QNQRRLYIMT LGCLAPYRRL GIGTKMLNHV LNICEKDGTF DNIYLHVQIS NESAI DFYRK FGFEI IETKK NYYKRIEPAD AHVLQKNLKV PSGQNADVQK TDN |
| <b>Tag:</b>                                  | His-tag   |
| <b>Predicted MW:</b>                         | 21.9 kDa  |
| <b>Concentration:</b>                        | lot specific  |
| <b>Purity:</b>                               | >95% by SDS - PAGE  |
| <b>Buffer:</b>                               | Presentation State: Purified<br>State: Liquid purified protein<br>Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1 mM DTT, 10% glycerol, 0.1M NaCl  |
| <b>Preparation:</b>                          | Liquid purified protein   |
| <b>Protein Description:</b>                  | Recombinant human NAA50 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.  |
| <b>Storage:</b>                              | Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.<br>Avoid repeated freezing and thawing.  |
| <b>Stability:</b>                            | Shelf life: one year from despatch.   |
| <b>RefSeq:</b>                               | <a href="#">NP_001295374</a>  |
| <b>Locus ID:</b>                             | 80218   |
| <b>UniProt ID:</b>                           | <a href="#">E7EQ69</a>  |
| <b>Cytogenetics:</b>                         | 3q13.31   |
| <b>Synonyms:</b>                             | hNaa50p; MAK3; NAT5; NAT5P; NAT13; NAT13P; SAN  |



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**Summary:**

N-alpha-acetyltransferase that acetylates the N-terminus of proteins that retain their initiating methionine (PubMed:19744929, PubMed:22311970, PubMed:21900231, PubMed:27484799). Has a broad substrate specificity: able to acetylate the initiator methionine of most peptides, except for those with a proline in second position (PubMed:27484799). Also displays N-epsilon-acetyltransferase activity by mediating acetylation of the side chain of specific lysines on proteins (PubMed:19744929). Autoacetylates in vivo (PubMed:19744929). The relevance of N-epsilon-acetyltransferase activity is however unclear: able to acetylate H4 in vitro, but this result has not been confirmed in vivo (PubMed:19744929). Component of a N-alpha-acetyltransferase complex containing NAA10 and NAA15, but NAA50 does not influence the acetyltransferase activity of NAA10: this multiprotein complex probably constitutes the major contributor for N-terminal acetylation at the ribosome exit tunnel, with NAA10 acetylating all amino termini that are devoid of methionine and NAA50 acetylating other peptides (PubMed:16507339, PubMed:27484799). Required for sister chromatid cohesion during mitosis by promoting binding of CDCA5/sororin to cohesin: may act by counteracting the function of NAA10 (PubMed:17502424, PubMed:27422821).[UniProtKB/Swiss-Prot Function]