



# Recombinant Human Bis (5'-adenosyl)-triphosphatase (FHIT)

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|--------------------------|--|
| <b>Product Code</b>      | CSB-RP115474h  |
| <b>Relevance</b>         | Cleaves P(1)-P(3)-bis(5'-adenosyl) triphosphate (Ap3A) to yield AMP and ADP. Can also hydrolyze P(1)-P(4)-bis(5'-adenosyl) tetraphosphate (Ap4A), but has extremely low activity with ATP. Modulates transcriptional activation by CTNNB1 and thereby contributes to regulate the expression of genes essential for cell proliferation and survival, such as CCND1 and BIRC5. Plays a role in the induction of apoptosis via SRC and AKT1 signaling pathways. Inhibits MDM2-mediated proteasomal degradation of p53/TP53 and thereby plays a role in p53/TP53-mediated apoptosis. Induction of apoptosis depends on the ability of FHIT to bind P(1)-P(3)-bis(5'-adenosyl) triphosphate or related compounds, but does not require its catalytic activity, it may in part come from the mitochondrial form, which sensitizes the low-affinity Ca <sup>2+</sup> transporters, enhancing mitochondrial calcium uptake. Functions as tumor suppressor |
| <b>Abbreviation</b>      | Recombinant Human FHIT protein   |
| <b>Storage</b>           | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.  |
| <b>Uniprot No.</b>       | P49789   |
| <b>Alias</b>             | AP3A hydrolase ;AP3AaseDiadenosine 5',5''-P1,P3-triphosphate hydrolaseDinucleosidetriphosphataseFragile histidine triad protein  |
| <b>Product Type</b>      | Recombinant Protein  |
| <b>Immunogen Species</b> | Homo sapiens (Human)   |
| <b>Purity</b>            | ≥ 90% as determined by SDS-PAGE.   |
| <b>Sequence</b>          | SFRFGQHLLIKPSVVFLKTELSFALVNRKPVVPGHVLVCLRPVERFHDLRPDEV<br>ADLFQTTQRVGTVVEKHFHGTSLTFMQDGPEAGQTVKHVHVHVLPRKAGDF<br>HRNSIYEELQKHKEDFPASWRSEEEMAAEAAALRVYFQ  |
| <b>Research Area</b>     | Epigenetics and Nuclear Signaling  |
| <b>Source</b>            | E.coli   |
| <b>Target Names</b>      | FHIT   |
| <b>Expression Region</b> | 2-147aa  |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.  |
| <b>Tag Info</b>          | N-terminal 6xHis-tagged  |
| <b>Mol. Weight</b>       | 20.7kDa  |
| <b>Protein Length</b>    | Full Length of Mature Protein  |



## Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

## Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

## Shelf Life

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