

## Product Information

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| <b>Description:</b>          | Recombinant human ADAR1 (adenosine deaminase, RNA-specific 1), full length encompassing amino acids 2-1226(end). This construct contains an N-terminal FLAG-tag. The recombinant protein was affinity purified.   |
| <b>Background:</b>           | ADAR1 (adenosine deaminase, RNA-specific 1) performs adenosine to inosine base editing in RNA, particularly targeting adenosines located within a specific stem-loop motif structure. It is proposed that ADARs evolved to provide additional diversity to the transcriptome and while the majority of ADAR editing events occur in non-coding RNAs, some, including the canonical GluA2 editing site, alter the amino acid sequence of coding proteins. ADAR1 plays a role in innate immunity by mitigating interferon signaling. Dysfunction of ADAR1 results in autoimmune disorders, and impacts cancer cell growth and proliferation as well as tumor response to immunotherapy. Since ADAR recognizes double-stranded RNA, it also functions to suppress or modify RNA viruses. Thus, it is implicated in viral evolution and in the emergence of viral variants such as SARS-CoV-2 variants. |
| <b>Species:</b>              | Human   |
| <b>Construct:</b>            | ADAR1 (FLAG-2-1226(end))  |
| <b>Concentration:</b>        | 0.77 mg/ml  |
| <b>Expression System:</b>    | HEK293  |
| <b>Purity:</b>               | 81%   |
| <b>Format:</b>               | Aqueous buffer solution.  |
| <b>Formulated In:</b>        | 50 mM Tris, pH 8.0, 750 mM NaCl, 0.01% Triton X-100, and 10% Glycerol   |
| <b>MW:</b>                   | 137 kDa   |
| <b>Genbank Accession:</b>    | NM_001111   |
| <b>Stability:</b>            | At least 6 months at -80°C.   |
| <b>Storage:</b>              | -80°C   |
| <b>Instructions for Use:</b> | Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.  |
| <b>Applications:</b>         | Useful as control in SDS-PAGE.  |

## Quality Control Data

## 4-20% SDS-PAGE Coomassie Staining

