MATERIAL DATA SHEET

His₆-Otubain-1, isoform 1, human recombinant
Cat. # E-522B

Otubain-1 is a C65 type peptidase and a member of the ovarian tumor (OTU) protein super-family found in eukaryotes, viruses and pathogenic bacterium. Identified by affinity purification with the DUB-specific inhibitor Ubiquitin-aldehyde, Otubain-1 contains an OTU domain, Ubiquitin-interacting motifs (UIMs) and Ubiquitin-associated domains (UBAs). A role in T-cell anergy has been described for this deubiquitinase through its interaction and regulation of the ubiquitin E3 ligase RNF128 (GRAIL). Otubain-1 displays exquisite specificity for K48-linked polyubiquitin substrates—no other di- or poly-Ubiquitin linkages are hydrolyzed.

Product Information

<table>
<thead>
<tr>
<th>Quantity:</th>
<th>50 µg</th>
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<tbody>
<tr>
<td>Stock:</td>
<td>X mg/ml (X µM) in 50 mM HEPES pH 7.5, 100 mM NaCl, 1 mM TCEP</td>
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<tr>
<td>MW:</td>
<td>32 kDa</td>
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<tr>
<td>Purity:</td>
<td>&gt; 95% by SDS-PAGE under reducing conditions and visualized by Colloidal Coomassie Blue stain</td>
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Use & Storage

Use: Recombinant Human Otubain-1 is a Ubiquitin-specific deconjugating enzyme. Reaction conditions will need to be optimized for each specific application. We recommend an initial Otubain-1 concentration of 0.1 – 2 µM. Otubain-1 will not efficiently utilize Ubiquitin-AMC or Ubiquitin-Rh110 (U-550, U-555) substrates.

Storage: Store at -80°C. Avoid multiple freeze/thaw cycles.

Literature

References:
Nanao M.H., et al. (2004) EMBO Reports 5: 783

For Laboratory Research Use Only, Not For Use in Humans

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