Technical Data Sheet

Purified Mouse Anti-DDB1

Product Information

Material Number: 612488
Size: 50 µg
Concentration: 250 µg/ml
Clone: 8/DDB1
Immunogen: Human DDB1 aa. 739-935
Isotype: Mouse IgG1
Reactivity: QC Testing: Human
Tested in Development: Mouse, Rat, Dog
Target MW: 127 kDa
Storage Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

DNA lesions caused by chemical mutagens or radiation are corrected via nucleotide excision repair (NER). The NER system includes multiple proteins involved in xeroderma pigmentosum (XP) disorders, a pathology that causes hypersensitivity to sunlight and higher incidence of skin cancer. The proteins that cause these disorders are XP proteins and include XPA, XPB, XPC, XPD, XPF, and XPG. There are six repair complexes in the NER system composed of 15-18 proteins that include XPA, XPC, XPF, TFIIH, and hHR23B. In addition to these proteins, UV damage DNA-binding (UV-DDB) protein activity has also been associated with the NER system due to the fact that UV-DDB activity is absent in a subset of XPE Ddb- patients. UV-DDB consists of two subunits, DDB1 and DDB2, which can be injected into XPE cells to restore DNA repair synthesis. UV-DDB activity may be involved in the early stages of NER when it may promote recognition of the damaged DNA through DDB2. In addition, DDB1 can bind the histone acetyltransferase p300, which may be important for chromatin remodeling during the early stages of NER. Thus, UV-DDB activity may be important for recognition of specific types of DNA damage during NER.

Western blot analysis of DDB1 on a HeLa cell lysate (Human cervical epithelial carcinoma; ATCC CCL-2.2).

Immunofluorescence staining of A431 cells (Human epithelial carcinoma; ATCC CRL-1555).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.
## Recommended Assay Procedure:

**Western blot:** Please refer to [http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml](http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml)

## Suggested Companion Products

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Name</th>
<th>Size</th>
<th>Clone</th>
</tr>
</thead>
<tbody>
<tr>
<td>611449</td>
<td>HeLa Cell Lysate</td>
<td>500 µg</td>
<td>(none)</td>
</tr>
<tr>
<td>554002</td>
<td>HRP Goat Anti-Mouse Ig</td>
<td>1.0 ml</td>
<td>(none)</td>
</tr>
<tr>
<td>554001</td>
<td>FITC Goat Anti-Mouse Ig</td>
<td>0.5 mg</td>
<td>Polyclonal</td>
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</tbody>
</table>

## Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

## References


