



SHANGHAI GENOMICS

Recombinant Human Damage-specific DNA Binding Protein 1

rHuDDB1

Catalog number: 3132-12

Specifications and Use

Source	● Sf9 insect cell
Molecular Mass	● 130 kDa
Purity	● ≥ 80% as determined by SDS-PAGE
Tag	● 6 × His
Formulation	● 20mM Tris-HCl, 150mM NaCl, 0.5mM EDTA, pH7.9, 10% glycerol
Stability	● Store at -80°C. Avoid repeated freezing and thawing
Usage	● FOR RESEARCH USE ONLY. NOT FOR HUMAN USE.

Human DDB1

The DDB heterodimer is involved in repairing DNA damaged by ultraviolet light. Specifically, DDB, also designated UV-damaged DNA binding protein (UV-DDB), xeroderma pigmentosum group E binding factor (XPE-BF) and hepatitis B virus X-associated protein 1 (XAP-1), binds to damaged cyclobutane pyrimidine dimers (CPDs). Mutations in the DDB2 gene are implicated as causes of xeroderma pigmentosum group E, an autosomal recessive disease in which patients are defective in nucleotide excision DNA repair. XPE is characterized by hypersensitivity of the skin to sunlight with a high frequency of skin cancer as well as neurologic abnormalities. The hepatitis B virus (HBV) X protein interacts with DDB1, which may mediate HBx transactivation.

Protein Sequence:

HHHHHHDYDIPTTENLYFQAAMDPEFRANPAMSYNYVVTAQKPTAVNGCVTGHFTSAEDLNLLIAK
NTRLEIYVVTAEGLRPVKEVGMYGKIAVMELFRPKGESKDLLFILTAKYNACILEYKQSGESIDIITRAH
GNVQDRIGRPSETGIIGIIDPECRMIGLRLYDGLFKVIPLDRDNKELKAFNIRLEELHVIDVKFLYGCQA
PTICFVYQDPQGRHVKTYESLREKEFNKGPWKQENVEAEASMVIAVPEPFGGAIIGQESITYHNG
DKYLAIAPPIIKQSTIVCHNRVDPNGSRVLLGDMEGRLFMLLLEKEEQMDGTVTLKDLRVELLGETSI
AECLTYLDNGVVFVGSRLGDSQLVKNLVDNSNEQGSYVAMETFTNLGPIVDMCVVDLERQGGQQL
VTCSGAFKEGSLRIIRNGIGIHEHASIDLPGIKGLWPLRSDPNRETYDTLVLSFVGQTRVLMNGEEV
EETELMGFVDDQQTFFCGNVAHQQLIQITSASVRLVSQEPKALVSEWKEPQAKNISVASCNSSQVV
VAVGRALYYLQIHPQELRQISHTEMEHEVAACLDITPLGDSNGLSPLCAIGLWTDISARILKLPSFELLH
KEMLGGEIIPRSILMTTFESSHYLLCALGDGALFYFGLNIETGLLSDRKKVTLGTQPTVLRFRSLSTT
NVFACSDRPTVIYSSNHKLVFSNVNLKEVNYMCPLNSDGYPSLALANNSTLTIGTIDEIQKLHIRT
PLYESPRKICYQEVSQCFGLSSRIEVQDTSGGTTALRPSASTQALSSSVSSSKLFSSTAPHETSF
GEEVEVHLLIIDQHTFEVLHAHQFLQNEYALSLVSKLKGKDPNTYFIVGTAMVYPEEAEPKQGRIVV
FQYSDGKLQTVAEKEVKGAVYSMVEFNGKLLASINSTVRLYEWTTTEKDV RTECNHYNMIMALYLKT
KGDFILVGDLMRSVLLLAYKPMEGNFEEIARDFNPNWMSAVEILDDDNFLGAENAFNLVFCQKDSA
ATTDEERQHLQEVGLFHLGFEVNVFCHGSLVMQNLGETSTPTQGSVLFGTVNGMIGLVTSLSESW
YNLLLDMQNRLNKVIKSVGKIEHSFWRFSFHTERKTEPATGFIDGDLIESFLDISRPKMQEVVANLQYD
DGSGMKREATADDLIKVVEELTRIH