Technical Data Sheet

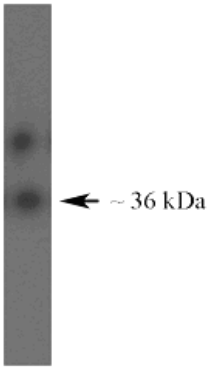
Purified Mouse Anti-Human ERCC1

Product Information

Material Number:	**556452**
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	8F1
Immunogen:	Human Recombinant ERCC1
Isotype:	Mouse IgG2b, κ
Reactivity:	QC Testing: Human
Target MW:	36 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Nucleotide excision repair (NER) is a major pathway by which cells remove UV and chemically induced damage from DNA. The biochemistry of NER is complex and includes recognition of the damaged DNA, formation of incisions ~26-29 nucleotides apart on each side of the damaged DNA, excision of an oligonucleotide carrying the damaged DNA, and synthesis of a repair patch using the opposite DNA strand as a template. The xeroderma pigmentosum (XP) factors are the best characterized components in the the NER pathway. They are termed XP-A to -G and are thought to be required for the first steps of the nucleotide excision repair process. XPA is a DNA damage-binding protein and XPC is a single stranded DNA-binding protein. XPB and XPD are DNA helicases that are components of the transcription factor TFIIH. The TFIIH complex is thought to be involved in transcription and NER. XPF is an endonuclease that binds to ERCC1 (for excision repair cross-complementing) and the ERCC1-XPF complex makes the incision 5' to the DNA damage. XPG is an endonuclease that makes the 3' incision. XPA migrates at a molecular weight of ~34 kDa in SDS/PAGE. ERCC1 migrates at a molecular weight of ~36 kDa in SDS/PAGE. Clone 8F1 reacts with human ERCC1. Full length, His-tagged recombinant ERCC1 was used as immunogen.



Western blot analysis of ERCC1. A HeLa cell lysate (Human cervical epitheloid carcinoma; ATCC CCL-2) was probed with the Mouse Anti-Human ERCC1 antibody (clone 8F1, Cat. No. 556452) at a concentration of 1.0 µg/mL. ERCC1 is identified at ~36 kDa.

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Application Notes

Application

Western blot	Routinely Tested
Immunoprecipitation	Not Recommended

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Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
611449	HeLa Cell Lysate	500 µg	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. 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.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Kenigsberg RL, Elliott PJ, Cuello AC. Two distinct monoclonal antibodies raised against mouse beta nerve growth factor. Generation of bi-specific anti-nerve growth factor anti-horseradish peroxidase antibodies for use in a homogeneous enzyme immunoassay. *J Immunol Methods.* 1991; 136(2):247-257. (Biology)
Thomas M. Jessell. Neuronal survival and synaspe formation. In: Eric R. Kandel, James H. Schwartz, Thomas M. Jessell, ed. *Principles of Neural Science.* NY.NY: Elsevier; 1991:929-944. (Biology)