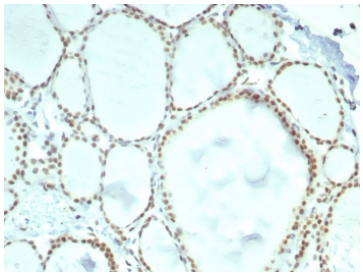
ERCC1 Antibody / Western Blot Antibody [clone ERCC1/7596] (V4634)

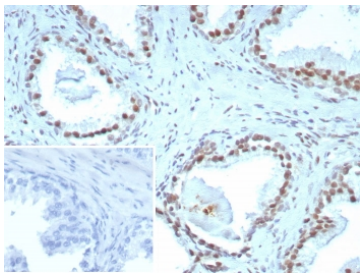
Catalog No.	Formulation	Size
V4634-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4634-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4634SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

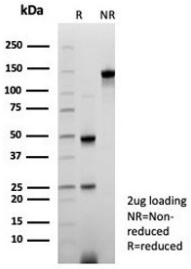
Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2b, kappa
Clone Name	ERCC1/7596
Purity	Protein A/G affinity
UniProt	P07992
Localization	Nucleus
Applications	Immunohistochemistry (FFPE): 1-2ug/ml for 30 min at RT Western blot: 2-4ug/ml
Limitations	This ERCC1 Antibody / Western Blot Antibody is available for research use only.



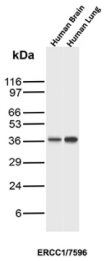
ERCC1 Antibody Thyroid IHC. Immunohistochemistry staining of FFPE human thyroid tissue with ERCC1 antibody (clone ERCC1/7596). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



ERCC1 Antibody Prostate IHC. Immunohistochemistry staining of FFPE human prostate tissue with ERCC1 antibody (clone ERCC1/7596). Inset: PBS used in place of primary Ab (secondary Ab negative control). HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 min and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free ERCC1 antibody (clone ERCC1/7596) as confirmation of integrity and purity.



ERCC1 Antibody Brain and Lung WB. Western blot analysis of human brain and human lung tissue lysates using ERCC1 Antibody (clone ERCC1/7596) detects a band at approximately 35-40 kDa, consistent with the predicted molecular weight of ERCC1, with comparable expression observed across both tissues.

Description

Excision repair cross-complementation group 1 (ERCC1) is a critical DNA repair protein involved in nucleotide excision repair and maintenance of genomic stability. The ERCC1 antibody enables detection of this protein in biochemical assays, including western blot, where it is used to evaluate expression levels across different tissue types and experimental conditions.

ERCC1 functions in complex with XPF to form an endonuclease that cleaves DNA at sites of damage, allowing removal of lesions and subsequent repair synthesis. This activity is essential for cellular response to DNA damage caused by environmental factors such as ultraviolet radiation and chemical exposure. Through its role in multiple repair pathways, ERCC1 contributes to preservation of genomic integrity and prevention of mutation accumulation.

Western blot analysis of ERCC1 typically reveals a band corresponding to the expected molecular weight, allowing direct comparison of protein expression across samples. Detection in human tissue lysates such as brain and lung demonstrates consistent expression, reflecting the fundamental role of ERCC1 in cellular maintenance and DNA repair.

In cancer biology, ERCC1 expression has been widely studied due to its involvement in cellular resistance to DNA-damaging therapies. Elevated expression may correlate with increased repair capacity, influencing tumor response to chemotherapy and radiation. As such, ERCC1 is an important target for studies focused on treatment response and tumor biology.

Biochemical detection methods complement tissue-based analysis by providing quantitative and comparative data across samples. This supports investigation of ERCC1 regulation under different experimental conditions and in different tissue types.

The ERCC1/7596 clone supports reliable detection in western blot applications, enabling analysis of protein expression and comparison across biological systems. Combined with other detection methods, this contributes to a comprehensive

understanding of ERCC1 function and regulation.

For broader detection of ERCC1 as a DNA repair marker, see our ERCC1 antibody.

Application Notes

Optimal dilution of the ERCC1 Antibody / Western Blot Antibody should be determined by the researcher.

Immunogen

A recombinant partial protein sequence (within amino acids 191-281) from the human protein was used as the immunogen for the ERCC1 antibody.

Storage

Aliquot the ERCC1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

ERCC1 antibody, ERCC1 western blot antibody, DNA repair ERCC1 antibody, ERCC1 protein detection antibody

Copyright © NSJ Bioreagents. All rights reserved.