Anti-ERCC1 [8F1]

Catalogue number: 153782
Sub-type: Primary antibody
Images:

Contributor

Inventor: Rick Wood
Institute: Cancer Research UK, London Research Institute: Lincoln's Inn Fields
Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Anti-ERCC1 [8F1]

Alternate name: ERCC Excision Repair 1, Endonuclease Non-Catalytic Subunit, Excision Repair Cross-Complementing Rodent Repair Deficiency, Complementation Group 1 (Includes Overlapping Antisense Sequence), Excision Repair Cross-Complementation Group 1, DNA Excision Repair Protein ERCC-1, COFS4, RAD1, UV2

Class: Monoclonal
Conjugate: Unconjugated
Description: The mammalian ERCC1 (Excision Repair Cross Complementing) polypeptide is required for nucleotide excision repair (NER) of damaged DNA and is homologous to Saccharomyces cerevisiae RAD10, which functions in repair and mitotic intrachromosomal recombination. NER mechanism involves dual incisions on both sides of the damage catalyzed by two nucleases. In mammalian cells XPG cleaves 3' of the DNA lesion while the ERCC1-XPF complex makes the 5' incision. Elevated levels of ERCC1 have been reported in Cisplatin-resistant cells. Defects in ERCC1 are the cause of cerebro-oculo-facio-skeletal syndrome type 4 (COFS4) [MIM:610758]. COFS is a degenerative autosomal recessive disorder of prenatal onset affecting the brain, eye and spinal cord. After birth, it leads to brain atrophy, hypoplasia of the corpus callosum, hypotonia, cataracts, microcornea, optic atrophy, progressive joint contractures and growth failure. Facial dysmorphism is a constant feature. Abnormalities of the skull, eyes, limbs, heart and kidney also occur.
Purpose:
Parental cell:
Organism:
Tissue:
Model:
Gender:
Isotype: IgG2b
Reactivity:

Human ; Rat
Selectivity:
Host: Mouse
Immunogen: Full length, HIS-tagged recombinant Human ERCC1
Immunogen UNIPROT ID:
Sequence:
Growth properties:
Production details:
Formulation:
Recommended controls: Tonsil
Bacterial resistance:
Selectable markers:
Additional notes:

Target details

Target: ERCC1

Target alternate names:

Target background: The mammalian ERCC1 (Excision Repair Cross Complementing) polypeptide is required for nucleotide excision repair (NER) of damaged DNA and is homologous to Saccharomyces cerevisiae RAD10, which functions in repair and mitotic intrachromosomal recombination. NER mechanism involves dual incisions on both sides of the damage catalyzed by two nucleases. In mammalian cells XPG cleaves 3' of the DNA lesion while the ERCC1-XPF complex makes the 5' incision. Elevated levels of ERCC1 have been reported in Cisplatin-resistant cells. Defects in ERCC1 are the cause of cerebro-oculo-facio-skeletal syndrome type 4 (COFS4) [MIM:610758]. COFS is a degenerative autosomal recessive disorder of prenatal onset affecting the brain, eye and spinal cord. After birth, it leads to brain atrophy, hypoplasia of the corpus callosum, hypotonia, cataracts, microcornea, optic atrophy, progressive joint contractures and growth failure. Facial dysmorphism is a constant feature. Abnormalities of the skull, eyes, limbs, heart and kidney also occur.

Molecular weight: 36 kDa

Ic50:

Applications

Application: FACS ; IHC ; IF ; IP ; WB
Application notes:

Handling

Format: Liquid
Concentration: 0.9-1.1 mg/ml
Passage number:

Growth medium:
Temperature:
Atmosphere:
Volume:
Storage medium:
Storage buffer: PBS with 0.02% azide
Storage conditions: -20° C
Shipping conditions: Shipping at 4° C

Related tools

Related tools:

References

References: Mercey et al. 2022. PLoS Biol. 20(6):e3001649. PMID: 35709082.