

Product datasheet for **RC204872**

XPA (NM_000380) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	XPA (NM_000380) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	XPA
Synonyms:	XP1; XPAC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC204872 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGGCGGCCGACGGGGCTTTGCCGGAGGCGGGCTTTAGAGCAACCCGCGGAGCTGCCTGCCTCGG
TGCGGGCAGTATCGAGCGGAAGCGGCAGCGGCACTGATGCTGCGCCAGGCCCGCTGGCTGCCCGGCC
CTACTCGCGCAGCGGCTGCGGCTACTGGAGGCATGGCTAATGTAAAAGCAGCCCCAAAGATAATTGAC
ACAGGAGGAGGCTTCATTTAGAAGAGGAAGAAGAAGAACAAGAAAATTGGAAAAGTTGTTCAACA
CAGGACCTGTTATGGAATTTGATTATGTAATATGCGAAGAATGTGGAAAGAATTTATGGATTCTTATCT
TATGAACCACTTTGATTTGCCAACTTGTGATAACTGCAGAGATGCTGATGATAAACACAAGCTTATAACC
AAAACAGAGGCAAAACAAGAATATCTTCTGAAAGACTGTGATTTAGAAAAAGAGAGCCACCTCTTAAAT
TTATTGTGAAGAAGAATCCACATCATTCAATGGGGTGATATGAACTCTACTTAAAGTTACAGATTGT
GAAGAGGTCTCTTGAAGTTGGGGTAGTCAAGAAGCATTAGAAGAAGCAAGGAAGTCCGACAGGAAAAC
CGAGAAAAATGAAACAGAAGAAATTTGATAAAAAAGTAAAAGAATTGCGGCGAGCAGTAAGAAGCAGCG
TGTGAAAAGGGAGACGATTGTTCAACATGAGTATGGACCAGAAGAAAACCTAGAAGATGACATGTA
CCGTAAGACTTGTACTATGTGTGCCATGAACTGACATATGAAAAATG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC204872 protein sequence
 Red=Cloning site Green=Tags(s)

MAAADGALPEAAALEQPAELPASVRASIERKRQRALMLRQARLAARPYSATAAAATGGMANVKAAPKIID
 TGGGFILLLLLLLLLLQKIGKVVHQPGPVMFEFDYVICCECGKEFMDSYLMNHFDLPTCDNCRDADDKHLIT
 KTEAKQEYLLKDCDLEKREPPLKFIKKNPVHSSQWGMKLYLKLQIVKRSLEWGSQEALKEAKEVRQEN
 REKMKQKKFDKKVKELRRAVRSSVWKRETIIVHQHEYGPEENLEDDMYRKTCTMCGHELTYEKM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6062_a08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_000380

ORF Size: 819 bp

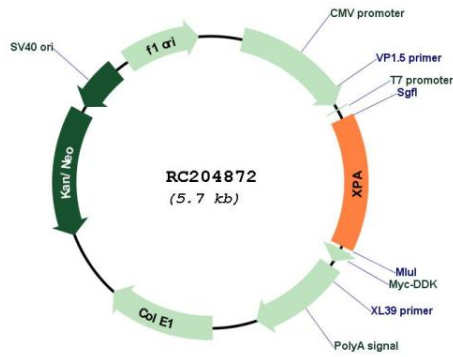
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

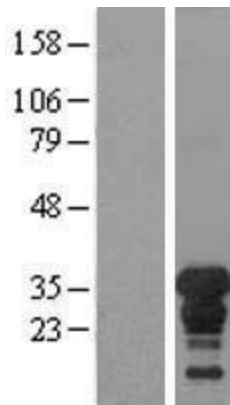
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_000380.4
RefSeq Size:	1491 bp
RefSeq ORF:	822 bp
Locus ID:	7507
UniProt ID:	P23025
Cytogenetics:	9q22.33
Domains:	XPA_C
Protein Families:	Druggable Genome
Protein Pathways:	Nucleotide excision repair
MW:	31.4 kDa
Gene Summary:	<p>This gene encodes a zinc finger protein plays a central role in nucleotide excision repair (NER), a specialized type of DNA repair. NER is responsible for repair of UV radiation-induced photoproducts and DNA adducts induced by chemical carcinogens and chemotherapeutic drugs. The encoded protein interacts with DNA and several NER proteins, acting as a scaffold to assemble the NER incision complex at sites of DNA damage. Mutations in this gene cause Xeroderma pigmentosum complementation group A (XP-A), an autosomal recessive skin disorder featuring hypersensitivity to sunlight and increased risk for skin cancer. [provided by RefSeq, Aug 2017]</p>

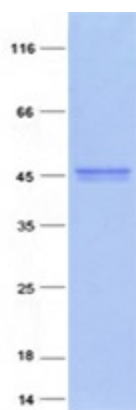
Product images:



Circular map for RC204872



Western blot validation of overexpression lysate (Cat# [LY424749]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204872 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified XPA protein (Cat# [TP304872]). The protein was produced from HEK293T cells transfected with XPA cDNA clone (Cat# RC204872) using MegaTran 2.0 (Cat# [TT210002]).