

Certificate of Analysis

ER Alpha Full Length, 140 µg

Recombinant Human, untagged, full length.

ThermoFisher
SCIENTIFIC

Part Number: A15674

Lot Number: 2612710A

Immediate Storage: -80°C

Shipping Conditions: dry ice

5781 Van Allen Way

Carlsbad, CA 92008

Phone: 760.603.7200

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Description:

ER Alpha Full Length, Recombinant Human, untagged, full length.

Concentration:

0.20 mg/mL total protein as measured using the Bradford protein assay with BSA as a standard.

Calculated **3,010 nM**.

Note: As of November 2012 we no longer perform radioligand binding assays to determine the active nM concentration and specific activity. The reported nM concentration is based on the Bradford protein assay and calculated using the molecular weight.

Assay Concentration(s):

34 nM ER Alpha Full Length is the final concentration recommended for the PolarScreen™ ER Alpha Competitor Assay, Red (A15884).

36 nM ER Alpha Full Length is the final concentration recommended for the PolarScreen™ ER Alpha Competitor Assay, Green (A15883 or A15882).

Aliases:

ESR1, ER, ESR, ESRA, Era, NR3A1

Storage and Handling:

If properly stored in its original container at -80°C, this product is guaranteed for 6 months from date of purchase. **Mix gently, do not vortex.**

Do **NOT** make single use aliquots.

Storage Buffer:

50 mM Tris-HCl (pH 8.0), 500 mM KCl, 1 mM EDTA, 1 mM Na₃VO₄, 2 mM DTT and 10% Glycerol.

QUALITY ASSURANCE

Functional Testing:

The performance of each lot of ER Alpha Full Length is confirmed in the following assay(s):

PolarScreen™ ER Alpha Competitor Assay, Green (A15883 or A15882). The ligand Estradiol, [6, 7-³H 9 (N)] was shown to displace Fluormone ES2 Green from ER Alpha Full Length.

PolarScreen™ ER Alpha Competitor Assay, Red (A15884). The ligand Estradiol, [6, 7-³H 9 (N)] was shown to displace Fluormone EL Red from ER Alpha Full Length.

Gel Information for ER Alpha Full Length

Page Description: The SDS-PAGE and/or Native PAGE were run on 4-20% Tris-Glycine Novex™ gels (Catalog #: EC6025BOX).

Lane 1: Invitrogen™ BenchMark™ Protein Ladder (Catalog #: 10747-012).

Lane 2: 0.4 µg ER Alpha Full Length

Lane 3: 0.8 µg ER Alpha Full Length

Lane 4: 2.0 µg ER Alpha Full Length

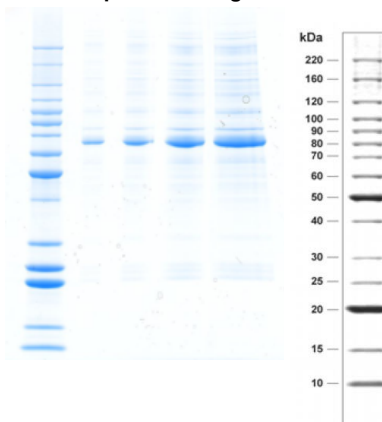
Lane 5: 4.0 µg ER Alpha Full Length

Purity:

80% as determined by a SDS-PAGE gel stained with SimplyBlue™ SafeStain.

Molecular Weight:

66.4 kDa. Calculated from the protein sequence(s).



Protein sequence alignment with reference sequence(s)

GenBank Accession Number: NP_000116.2

1	MTMTLHTKAS	GMALLHQIQG	NELEPLNRPQ	LKIPLERPLG	EVYLDSSKPA	VYNYPEGAAY	EFNAAAAANA	QVYGQTGLPY	GPGSEAAAFG	SNGLGGFPPL	IVGN ER ALPHA
1	MTMTLHTKAS	GMALLHQIQG	NELEPLNRPQ	LKIPLERPLG	EVYLDSSKPA	VYNYPEGAAY	EFNAAAAANA	QVYGQTGLPY	GPGSEAAAFG	SNGLGGFPPL	NP_000116.2
101	NSVSPSPLML	LHPPPQLSPF	LQPHGQQVPY	YLENEPSGYT	VREAGPPAFY	RPNSDNRRQG	GRERLASTND	KGSMAMESAK	ETRYCAVCND	YASGYHYGVW	
101	NSVSPSPLML	LHPPPQLSPF	LQPHGQQVPY	YLENEPSGYT	VREAGPPAFY	RPNSDNRRQG	GRERLASTND	KGSMAMESAK	ETRYCAVCND	YASGYHYGVW	
201	SCEGCKAFFK	RSIQGHNDYM	CPATNQCTID	KNRRKSCQAC	RLRKCYEVGM	MKGGIRKDRR	GGRMLKHKQ	RDDGEGRGEV	GSAGDMRAAN	LWPSPLMIKR	
201	SCEGCKAFFK	RSIQGHNDYM	CPATNQCTID	KNRRKSCQAC	RLRKCYEVGM	MKGGIRKDRR	GGRMLKHKQ	RDDGEGRGEV	GSAGDMRAAN	LWPSPLMIKR	
301	SKKNSLALS	TADQMVSALL	DAEPPILYSE	YDPTRPFSEA	SMMGLLTNLA	DRELVHMINW	AKRVPGFVDL	TLHDQVHLE	CAWLEILMIG	LVWRSMEHPG	
301	SKKNSLALS	TADQMVSALL	DAEPPILYSE	YDPTRPFSEA	SMMGLLTNLA	DRELVHMINW	AKRVPGFVDL	TLHDQVHLE	CAWLEILMIG	LVWRSMEHPG	
401	KLLFAPNLLL	DRNQGKCEVG	MVEIFDMLLA	TSSRFMMNL	QGEFVCLKS	IILLNSGVYT	FLSSTLKSLE	EKDHIHRVLD	KITDTLIHLM	AKAGLTQQQ	
401	KLLFAPNLLL	DRNQGKCEVG	MVEIFDMLLA	TSSRFMMNL	QGEFVCLKS	IILLNSGVYT	FLSSTLKSLE	EKDHIHRVLD	KITDTLIHLM	AKAGLTQQQ	
501	HQRLAQLLLI	LSHIRHMSNK	GMEHLYSMKC	KNVVPLYDLL	LEMLDAHRLH	APTSRGGASV	EETDQSHLAT	AGSTSSHSLQ	KYYITGEAEG	FPATV	
501	HQRLAQLLLI	LSHIRHMSNK	GMEHLYSMKC	KNVVPLYDLL	LEMLDAHRLH	APTSRGGASV	EETDQSHLAT	AGSTSSHSLQ	KYYITGEAEG	FPATV	

* highlighted residues denote differences from the reference protein sequence(s).



Chevojn Joseph, Director, Quality

Date: 22/Feb/2023

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