Certificate of Analysis
CSF1R, 100 µg

Colony Stimulating Factor 1 Receptor, Histidine-tagged

Part Number: PR4598A
Lot Number: 2475673P
Immediate Storage: -80°C
Shipping Conditions: dry ice

5781 Van Allen Way
Carlsbad, CA 92008
Phone: 760.603.7200
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Description:

Recombinant human, catalytic domain (amino acids 538-910), Histidine-tagged, expressed in insect cells. Activated in-vitro via autophosphorylation.

Specific Activity:

410 nmoles of phosphate transferred to poly [Glu, Tyr] 4:1 substrate per minute per mg of total protein at 30°C. Activity determined at a final protein concentration of 2 µg/mL.

Concentration:

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

Calculated **10,000 nM**.

Aliases:

FMS, CSFR, C-FMS, CD115

Storage and Handling:

For maximum recovery please spin prior to use. Unless noted below, aliquots of the 5 ug, 10ug and 20ug sizes of kinase are not recommended as materials can be used in original packaging until exhausted. For larger sizes, the number of freeze/thaws may be reduced by preparing aliquots, aliquots below 20 µL are not recommended. **Please never store a kinase diluted.** If properly stored at −80°C, this product is guaranteed for 6 months from date of purchase.

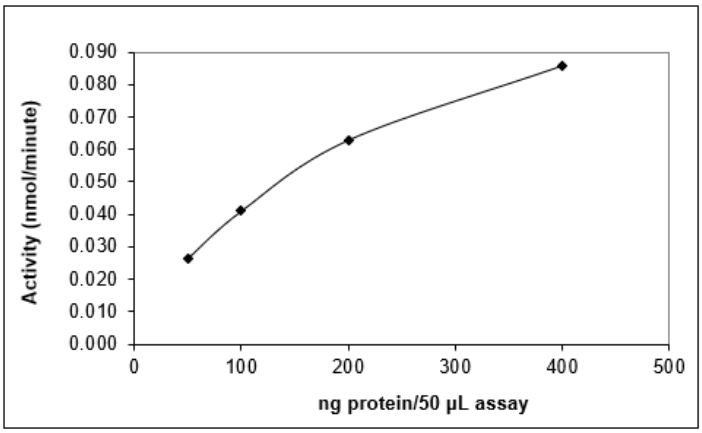
This product is not stable at room temperature (50% activity loss is observed within 6 hours at room temperature).

Storage Buffer:

50 mM Tris (pH 7.5), 100 mM NaCl, 0.05 mM EDTA, 0.05% Triton® X–100, 2 mM DTT and 50% Glycerol.

QUALITY ASSURANCE

CSF1R Activity Graph



Gel Information for CSF1R

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

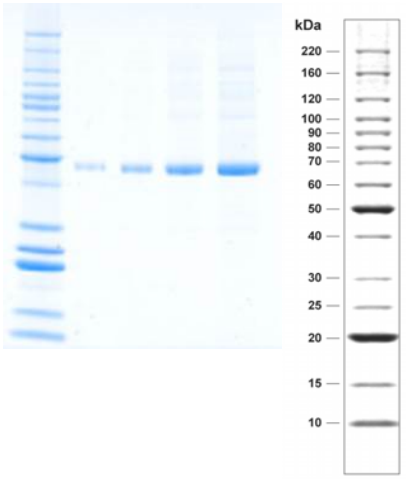
Lane 1: Invitrogen™ BenchMark™ Protein Ladder (Catalog #: 10747-012).

Lane 2: 0.3 µg CSF1R

Lane 3: 0.6 µg CSF1R

Lane 4: 1.5 µg CSF1R

Lane 5: 3.0 µg CSF1R



Dilution Buffer:

20 mM Tris (pH 7.5), 0.05% NP−40, 0.1 mg/mL BSA, 1 mM DTT and 10% Glycerol.

Assay Conditions:

CSF1R was pre-diluted in enzyme dilution buffer and assayed in 50 mM HEPES (pH 7.5), 10 mM $MgCl_2$, 10% Glycerol, 2.5 mM DTT, 0.01% Triton® X-100, 200 µM ATP, 200 µg/mL poly [Glu, Tyr] 4:1 substrate and trace [^{32}P]-γ-ATP for 10 minutes at 30°C.

Purity:

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

Molecular Weight:

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

Mass Spectrometry:

CSF1R was subjected to proteolytic digest followed by mass spec analysis. The resulting MS/MS data verified CSF1R identity by comparison against the amino acid sequence(s) of the recombinant protein.

Protein sequence alignment with reference sequence(s)

GenBank Accession Number: NP_005202

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  1 MYKYKQKPKY QVRWKIIESY EGNSYTFIDP TQLPYNEKWE FPRNNLQFGK TLGAGAFGKV VEATAFGLGK EDAVLKVAVK MLKSTAHADE KEALMSELKI IVGN CSF1R
537 LYKYKQKPKY QVRWKIIESY EGNSYTFIDP TQLPYNEKWE FPRNNLQFGK TLGAGAFGKV VEATAFGLGK EDAVLKVAVK MLKSTAHADE KEALMSELKI NP_005202

101 MSHLGQHENI VNLLGACTHG GPVLVITEYC CYGDLLNFLR RKAEAMLGPS LSPGQDPEGG VDYKNIHLEK KYVRRDSGFS SQGVDTYVEM RPVSTSSNDS
637 MSHLGQHENI VNLLGACTHG GPVLVITEYC CYGDLLNFLR RKAEAMLGPS LSPGQDPEGG VDYKNIHLEK KYVRRDSGFS SQGVDTYVEM RPVSTSSNDS

201 FSEQDLDKED GRPLELRDLL HFSSQVAQGM AFLASKNCIH RDVAARNVLL TNGHVAKIGD FGLARDIMND SNYIVKGNAR LPVKWMAPES IFDCVYTVQS
737 FSEQDLDKED GRPLELRDLL HFSSQVAQGM AFLASKNCIH RDVAARNVLL TNGHVAKIGD FGLARDIMND SNYIVKGNAR LPVKWMAPES IFDCVYTVQS

301 DVWSYGILLW EIFSLGLNPY PGILVNSKFY KLVKDGYQMA QPAFAPKNIY SIMQACWALE PTHRPTFQQI CSFLKGVEAC QLGTDDYDIP TTHHHHHH.
837 DVWSYGILLW EIFSLGLNPY PGILVNSKFY KLVKDGYQMA QPAFAPKNIY SIMQACWALE PTHRPTFQQI CSFL
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* highlighted residues denote differences from the reference protein sequence(s).

Chevohn Joseph, Director, Quality Date: 29/Jun/2022