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## Product datasheet for MR211073

## AxI (NM_009465) Mouse Tagged ORF Clone

## Product data:

Product Type:
Product Name:
Expression Plasmids
Axl (NM_009465) Mouse Tagged ORF Clone
Tag:
Symbol:
Synonyms:
Mammalian Cell
Selection:
Vector:
E. coli Selection:

Myc-DDK
AxI
Al323647; Ark; Tyro7; Ufo
Neomycin
pCMV6-Entry (PS100001)
Kanamycin ( $25 \mathrm{ug} / \mathrm{mL}$ )

## ORF Nucleotide

Sequence:
>MR211073 representing NM_009465
Red=Cloning site Blue=ORF Green=Tags(s)
TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC

ATGGGCAGGGTCCCGCTGGCCTGGTGGTTGGCGCTGTGCTGCTGGGGGTGTGCAGCCCATAAGGACACAC AGACCGAGGCTGGCAGCCCGTTTGTGGGGAACCCAGGGAATATCACAGGTGCCAGAGGACTCACGGGGAC ACTTCGGTGTGAGCTCCAGGTTCAGGGGGAACCCCCTGAGGTGGTGTGGCTTCGAGATGGACAGATCCTA GAACTGGCTGATAACACCCAGACCCAGGTGCCTCTGGGCGAAGACTGGCAAGATGAATGGAAAGTTGTCA GTCAGCTCAGAATCTCAGCCCTGCAACTTTCAGATGCAGGGGAGTACCAGTGTATGGTGCATCTAGAAGG ACGGACCTTTGTGTCTCAGCCGGGCTTTGTAGGGCTGGAAGGTCTCCCGTACTTCCTGGAGGAGCCTGAG GACAAAGCTGTGCCTGCCAACACCCCTTTCAACCTAAGCTGCCAGGCCCAGGGACCCCCGGAACCCGTGA CCCTACTCTGGCTTCAAGATGCTGTCCCCCTGGCCCCAGTCACAGGACACAGCTCCCAGCACAGTCTGCA AACTCCAGGCCTGAACAAGACATCTTCTTTCTCATGTGAAGCCCACAATGCCAAGGGAGTCACCACCTCC CGCACAGCCACCATCACAGTGCTCCCCCAGAGGCCTCACCATCTCCACGTGGTTTCCAGACAACCTACGG AGCTAGAGGTAGCTTGGACCCCTGGCCTGAGTGGCATCTACCCGCTCACCCACTGCAACCTGCAGGCCGT GCTGTCAGACGATGGGGTGGGTATCTGGCTGGGAAAGTCAGATCCTCCTGAAGACCCCCTCACCTTGCAA GTATCAGTGCCCCCCCACCAGCTTCGGCTGGAAAAGCTCCTTCCTCACACCCCGTATCACATCCGGATAT CCTGCAGCAGCAGCCAGGGCCCCTCACCTTGGACCCACTGGCTTCCTGTGGAGACCACAGAGGGAGTGCC CTTGGGTCCCCCTGAGAACGTTAGCGCCATGCGGAATGGGAGCCAGGTCCTCGTGCGTTGGCAGGAGCCA AGGGTGCCCCTGCAAGGCACCCTGTTAGGGTACCGGCTGGCATATCGAGGCCAGGACACCCCCGAGGTAC TTATGGATATAGGGCTAACTCGAGAGGTGACCTTGGAACTGCGGGGGGACAGGCCTGTGGCTAACCTGAC TGTGTCTGTGACAGCCTATACCTCGGCTGGGGATGGGCCCTGGAGCCTTCCTGTGCCCCTAGAGCCCTGG CGCCCAGGGCAAGGACAGCCACTCCACCATCTGGTGAGTGAACCCCCACCTCGCGCCTTCTCGTGGCCTT GGTGGTATGTACTGCTGGGAGCACTTGTGGCTGCCGCCTGCGTCCTCATCTTGGCCCTGTTCCTTGTCCA TCGGAGGAAGAAGGAGACTCGATATGGGGAGGTGTTTGAGCCAACCGTGGAAAGAGGTGAACTGGTAGTC AGGTACCGTGTCCGAAAGTCCTACAGCCGGCGGACCACTGAAGCCACCTTGAACAGTCTGGGCATCAGTG AAGAGCTGAAGGAGAAACTACGAGACGTCATGGTAGATCGGCATAAGGTGGCCTTGGGGAAGACCCTGGG AGAAGGAGAATTTGGCGCTGTGATGGAAGGTCAGCTCAATCAGGATGACTCCATCCTCAAGGTCGCTGTG AAGACCATGAAAATTGCCATCTGCACAAGATCAGAGCTGGAGGATTTCCTGAGTGAAGCTGTCTGCATGA AGGAATTTGACCACCCCAACGTCATGAGGCTCATTGGCGTCTGTTTTCAGGGCTCTGACAGAGAGGGTTT CCCAGAACCTGTGGTCATCTTGCCTTTCATGAAACACGGAGACCTACACAGTTTCCTCCTGTACTCCCGG CTCGGGGACCAGCCAGTGTTCCTGCCCACTCAGATGCTAGTGAAGTTCATGGCCGACATTGCCAGTGGTA TGGAGTACCTGAGTACCAAGAGATTCATACATCGGGACCTGGCTGCCAGGAACTGCATGCTGAATGAGAA CATGTCCGTGTGTGTGGCAGACTTCGGGCTCTCCAAGAAGATCTACAACGGGGATTACTACCGCCAAGGG CGCATTGCCAAGATGCCAGTCAAGTGGATTGCTATTGAGAGTCTGGCAGATCGGGTCTACACCAGCAAGA GCGATGTGTGGTCCTTCGGTGTGACAATGTGGGAGATCGCCACCCGAGGCCAAACTCCCTATCCAGGGGT GGAGAACAGTGAGATTTACGACTACCTGCGTCAAGGAAATCGGCTGAAACAGCCTGTGGACTGTCTGGAC GGCCTGTATGCCCTGATGTCTCGGTGCTGGGAACTGAACCCTCGAGACCGGCCAAGTTTTGCGGAGCTCC GGGAAGACTTGGAGAACACACTGAAGGCTCTGCCCCCTGCTCAGGAGCCAGATGAAATCCTCTATGTCAA CATGGATGAGGGCGGAAGCCACCTTGAACCCCGTGGGGCTGCTGGAGGAGCTGACCCCCCAACCCAACCT GATCCTAAGGATTCCTGTAGCTGTCTCACTGCAGCTGACGTCCACTCAGCTGGACGCTATGTCCTTTGTC CTTCTACAGCCCCAGGACCCACTCTGTCTGCTGACAGAGGCTGCCCAGCACCTCCAGGGCAGGAGGACGG AGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA

## Protein Sequence:

## Restriction Sites:

## Cloning Scheme:

>MR211073 representing NM_009465
Red=Cloning site Green=Tags(s)
MGRVPLAWWLALCCWGCAAHKDTQTEAGSPFVGNPGNITGARGLTGTLRCELQVQGEPPEVVWLRDGQIL ELADNTQTQVPLGEDWQDEWKVVSQLRISALQLSDAGEYQCMVHLEGRTFVSQPGFVGLEGLPYFLEEPE DKAVPANTPFNLSCQAQGPPEPVTLLWLQDAVPLAPVTGHSSQHSLQTPGLNKTSSFSCEAHNAKGVTTS RTATITVLPQRPHHLHVVSRQPTELEVAWTPGLSGIYPLTHCNLQAVLSDDGVGIWLGKSDPPEDPLTLQ VSVPPHQLRLEKLLPHTPYHIRISCSSSQGPSPWTHWLPVETTEGVPLGPPENVSAMRNGSQVLVRWQEP RVPLQGTLLGYRLAYRGQDTPEVLMDIGLTREVTLELRGDRPVANLTVSVTAYTSAGDGPWSLPVPLEPW RPGQGQPLHHLVSEPPPRAFSWPWWYVLLGALVAAACVLILALFLVHRRKKETRYGEVFEPTVERGELVV RYRVRKSYSRRTTEATLNSLGISEELKEKLRDVMVDRHKVALGKTLGEGEFGAVMEGQLNQDDSILKVAV KTMKIAICTRSELEDFLSEAVCMKEFDHPNVMRLIGVCFQGSDREGFPEPVVILPFMKHGDLHSFLLYSR LGDQPVFLPTQMLVKFMADIASGMEYLSTKRFIHRDLAARNCMLNENMSVCVADFGLSKKIYNGDYYRQG RIAKMPVKWIAIESLADRVYTSKSDVWSFGVTMWEIATRGQTPYPGVENSEIYDYLRQGNRLKQPVDCLD GLYALMSRCWELNPRDRPSFAELREDLENTLKALPPAQEPDEILYVNMDEGGSHLEPRGAAGGADPPTQP DPKDSCSCLTAADVHSAGRYVLCPSTAPGPTLSADRGCPAPPGQEDGA

## TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Sgfl-Mlul
Cloning sites used for ORF Shuttling:


* The last codon before the Stop codon of the ORF

ACCN:
NM_009465

ORF Size:
OTI Disclaimer:

OTI Annotation:

Components:

Reconstitution Method: 1. Centrifuge at 5,000xg for 5 min .
2. Carefully open the tube and add 100 ul 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 $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$.

| RefSeq: | NM 009465.4 |
| :--- | :--- |
| RefSeq Size: | 4119 bp |
| RefSeq ORF: | 2667 bp |
| Locus ID: | 26362 |
| UniProt ID: | $\underline{\text { Q00993 }}$ |
| Cytogenetics: | 714.02 cM |
| MW: | 98.6 kDa |

Gene Summary:

Receptor tyrosine kinase that transduces signals from the extracellular matrix into the cytoplasm by binding growth factor GAS6 and which is thus regulating many physiological processes including cell survival, cell proliferation, migration and differentiation. Ligand binding at the cell surface induces dimerization and autophosphorylation of AXL. Following activation by ligand, ALX binds and induces tyrosine phosphorylation of PI3-kinase subunits PIK3R1, PIK3R2 and PIK3R3; but also GRB2, PLCG1, LCK and PTPN11. Other downstream substrate candidates for AXL are CBL, NCK2, SOCS1 and TNS2. Recruitment of GRB2 and phosphatidylinositol 3 kinase regulatory subunits by AXL leads to the downstream activation of the AKT kinase. GAS6/AXL signaling plays a role in various processes such as endothelial cell survival during acidification by preventing apoptosis, optimal cytokine signaling during human natural killer cell development, hepatic regeneration, gonadotropin-releasing hormone neuron survival and migration, platelet activation, or regulation of thrombotic responses. Plays also an important role in inhibition of Toll-like receptors (TLRs)-mediated innate immune response.[UniProtKB/Swiss-Prot Function]

## Product images:



