

Human AGS NOD1 KD (AGS cl.1) Cell Line

Catalogue number: 153735

Sub-type: Continuous

Images:

Contributor

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Images:

Tool details

***FOR RESEARCH USE ONLY**

Name: Human AGS NOD1 KD (AGS cl.1) Cell Line

Alternate name: Human nucleotide-binding oligomerization domain-containing protein 1, NOD1

Class:

Conjugate:

Description: NOD1 regulates host epithelial cell responses. Upregulates antimicrobial peptides of the beta-defensin (hBD) family secreted by epithelial cells. NOD1 is an intracellular pattern recognition receptor that mediates innate and adaptive immunity. NOD1 specifically recognises molecules with a D-glutamyl-meso-diaminopimelic acid (iE-DAP) moiety, such as the Gram-negative bacterial cell wall component, peptidoglycan, which results in the activation of the NF-kB pathway and induction of cytokines via RIPK2 and IKK-gamma. Confers reactivity to bacterial liposaccharides (LPS) and confers immunity to viral and bacterial pathogens. These cell lines have for example been used to study NOD1 responds to Helicobacter pylori infection. H. pylori causes chronic inflammation, a key precursor to gastric adenocarcinoma. AGS cells deficient in NOD1 can be used to model gastric adenocarcinoma in the context of various pathogens.

Purpose:

Parental cell: AGS

Organism: Human

Tissue: Gastric

Model:

Gender:

Isotype:

Reactivity:

Selectivity:

Host:

Immunogen:

Immunogen UNIPROT ID:

Sequence:

Growth properties:

Production details: Human AGS NOD1 Knock-down (KD) cells were generated by integration of an expression vector containing a small interference RNA (siRNA) directed to the gene encoding the CARD domain of the NOD1 gene. Recommended Freezing Composition: 90% (v/v) FCS - 10% (v/v) DMSO

Formulation:

Recommended controls: Human AGS Control (clone siEGFP)

Bacterial resistance:

Selectable markers:

Additional notes:

Target details

Target:

Target alternate names:

Target background:

Molecular weight:

Ic50:

Applications

Application:

Application notes:

Handling

Format: Frozen

Concentration:

Passage number:

Growth medium: RPMI with: 10% foetal calf serum; 1% penicillin-streptomycin; and 1% L-glutamine. Subculture cells every 2-3 days in ratios of 1:2-1:4 in T25 or T75 flasks.

Temperature:

Atmosphere:

Volume:

Storage medium: 90% (v/v) FCS - 10% (v/v) DMSO

Storage buffer:

Storage conditions:

Shipping conditions: Dry ice

Related tools

Related tools: Human AGS NOD1 KO (Clone 41H8) Cell Line ; Human AGS NOD1 KO (Clone 41A8) Cell Line

References

References: Tran et al. 2018. Cell Microbiol. 20(5):e12826. PMID: 29392836. ; NOD1 is required for Helicobacter pylori induction of IL-33 responses in gastric epithelial cells.

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