

# HeLa GRASP55 and GRASP65 double knockout cell line

**Catalogue number:** 157708

**Sub-type:** Continuous

**Images:**

## Contributor

**Inventor:** Yanzhuang Wang

**Institute:** University of Michigan

**Images:**

## Tool details

**\*FOR RESEARCH USE ONLY**

**Name:** HeLa GRASP55 and GRASP65 double knockout cell line

**Alternate name:**

**Class:**

**Conjugate:**

**Description:** Clustered regularly interspaced short palindromic repeats (CRISPR)/Cas9 technology was used to knock out Golgi reassembly stacking protein of 65 kDa (GRASP65) and/or Golgi reassembly stacking protein of 55 kDa (GRASP55) in HeLa and HEK293 cells. By knocking out GRASPs it was demonstrated that these proteins are essential for Golgi stacking structure formation and accurate posttranslational modifications function in the Golgi. The GRASP knock out cell lines can be used to study the role of GRA...

**Purpose:**

**Parental cell:** HeLa cell line

**Organism:** Human

**Tissue:** Cervix

**Model:** Knock-Out

**Gender:**

**Isotype:**

**Reactivity:**

**Selectivity:**

**Host:**

**Immunogen:**

**Immunogen UNIPROT ID:**

**Sequence:**

**Growth properties:**

**Production details:** Duplexed sgRNA oligos were digested and ligated into pSpCas9(BB)-2A-GFP(PX458) and pSpCas9(BB)-2A-Puro(PX459)v plasmids to generate GRASP55/65 GFP or Puro plasmids, respectively. CRISPR knock out cells were generated by transfection with GRASP55/65 GFP or Puro plasmids followed by enrichment of GFP-expressing cells by FACS sorting or by selection with 1  $\mu$ g/ml puromycin, respectively. Individual clones were generated by plating cells at low density and isolating individual colonies. GRA...

**Formulation:**

**Recommended controls:** HeLa parental line

**Bacterial resistance:**

**Selectable markers:**

**Additional notes:** The HeLa WT cell line can be provided, as a positive control, if requested with order. CRISPR edited HeLa cells. Cancer Research Technology Limited (trading research tools as Ximbio) has been granted a non-exclusive license to the CRISPR-Cas9 technology by ERS Genomics Ltd under the patent rights listed here. This license from ERS Genomics Ltd allows Ximbio to develop an...

## Target details

**Target:** GRASP55 and GRASP65

**Target alternate names:**

**Target background:**

**Molecular weight:**

**Ic50:**

## Applications

**Application:**

**Application notes:** Cancer Research Technology Limited (trading research tools as CancerTools.org) has been granted a non-exclusive license to the CRISPR-Cas9 technology by ERS Genomics Ltd under the patent rights listed here: [https://www.cancertools.org/tool-faqs#hs\\_cos\\_wrapper\\_widget\\_1649861453796](https://www.cancertools.org/tool-faqs#hs_cos_wrapper_widget_1649861453796) This license from ERS Genomics Ltd allows CancerTools.org to develop and commercialise CRISPR-Cas9 modified cell lines for research use only. CancerTools.org can provide these modified CRISPR-Cas9 cell lines to comp...

## Handling

**Format:** Frozen

**Concentration:**

**Passage number:**

**Growth medium:**

**Temperature:**

**Atmosphere:**

**Volume:**

**Storage medium:**

**Storage buffer:**

**Storage conditions:**

**Shipping conditions:** Dry ice

## Related tools

**Related tools:**

## References

**References:** Bekier ME et al. 2017. Mol Biol Cell. 28(21):2833-2842. PMID: 28814501.

CancerTools.org