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**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

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**Technical code of practice with genome editing and breeding  
for livestock and poultry**

畜禽基因组编辑育种技术规程

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### Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document is proposed and coordinated by the China National Institute of Standardization.

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Technical regulations for livestock and poultry genome editing breeding

### 1 Scope

This document establishes the technical process for genome editing breeding of livestock and poultry and stipulates relevant requirements and operational procedures.

This document applies to CRISPR/Cas technology operations for livestock and poultry genome editing breeding.

## **2 Normative references**

GB 19489

## **3 Terms and definitions**

The following terms and definitions apply to this document.

### **3.1 Genome editing**

Genetic engineering that targets and modifies specific deoxyribonucleic acid (DNA) fragments in the genome of an organism without introducing foreign DNA technology.

### **3.2 guide RNA guideRNA;gRNA**

Small molecule ribonucleic acid (RNA) plays a guiding and template role in genome editing technology and can mediate the genome editing process.

### **4.1 Experimental site**

Laboratory requirements should comply with the corresponding biosafety level requirements of GB 19489.

### **4.2 Personnel**

Necessary training in experimental techniques and biosafety management standards should be obtained.

### **4.3 Records**

It should include but not be limited to the start and end time of the test, the name, source, number, storage information of the test material, target gene sequence information information, carrier structure, test spectrum and result judgment, etc.

Records should be kept standardized, complete and consistent, and relevant regulations should be made for the preservation of records.

### **4.4 Animal Welfare**

The requirements of relevant animal welfare regulations should be met.