

---

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

# anti-Llama IgG (H+L) antibody, HRP conjugated [PABAL1]

Containing stabilizer

CAS No.:  
EG No.:  
INDEX No.:  
REACH No.:

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses:** The product is intended for research.

**Uses advised against:** Diagnostics

### 1.3. Details of the supplier of the safety data sheet

#### Manufacturer

ChromoTek GmbH

Am Klopferspitz 19  
D 82152 Planegg-Martinsried

**Telephone:** +49 89 124 148 810

**Telefax:** +49 89 124 148 811

#### Supplier (manufacturer/importer/only representative/downstream user/distributor)

ChromoTek GmbH

Am Klopferspitz 19  
D 82152 Planegg-Martinsried

**Telephone:** +49 89 124 148 810

**Telefax:** +49 89 124 148 811

#### Information contact

ChromoTek GmbH

**Information telephone:** +49 89 124 148 810

**Information telefax:** +49 89 124 148 811

**E-mail (competent person):** info@chromotek.com

**Website:** http://www.chromotek.com/

### 1.4. Emergency telephone number

Giftnotruf München, Toxikologischen Abteilung,  
II.Med. Klinik der Technischen Universität  
München

This number is serviced during office hours.

**Telephone:** +49 (0)89 19240

---

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008: -

### 2.2. Label elements

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms: -

Signal word: -  
Hazard statements: -  
Precautionary statements: -

Hazardous component(s) for labelling

Special labelling of particular preparations:

### 2.3. Other hazards

The substance is classified as not hazardous according to regulation (EC) No 1272/2008 [CLP]. This substance / mixture does not contain components in concentrations of 0.1% or higher, which are classified as either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB).

---

## SECTION 3: Composition / information on ingredients

### 3.1. Substances

Mixtures

### 3.2. Mixtures

Contains stabilizers <0.1 wt.-%.

#### Composition/information on ingredients

Substance:	EC-no.:	CAS-No.:	INDEX no.:	REACH-no.:	Concentration:	Classification: EC 1272/2008 (CLP):
------------	---------	----------	------------	------------	----------------	-------------------------------------

(Full text of H- and EUH-phrases: see section 16.)

---

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

- General information:** In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
- Following inhalation:** Move victim to fresh air. Put victim at rest and keep warm. In case of irregular breathing or respiratory arrest provide artificial respiration. Position and transport victim on their side. In case of respiratory distress, bring into semi-upright, seated position. Seek medical attention if problems persist.
- Following skin contact:** After contact with skin, wash immediately with plenty of water and soap. In case of skin irritation, consult a physician.
- After eye contact:** In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Seek medical attention if problems persist.
- After ingestion:** Rinse mouth thoroughly with water. Seek medical attention if problems persist.

### 4.2. Most important symptoms and effects, both acute and delayed

No known symptoms to date.

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

**Suitable extinguishing media:** Water fog. Carbon dioxide (CO<sub>2</sub>). Foam. dry extinguishing powder.

**Unsuitable extinguishing media:** High power water jet.

### 5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Pyrolysis products, toxic, Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Nitrogen oxides (NO<sub>x</sub>), Sulphur dioxide (SO<sub>2</sub>), Hydrogen chloride (HCl).

### 5.3. Advice for firefighters

#### General information

Co-ordinate fire-fighting measures to the fire surroundings.

#### Special protective equipment for firefighters:

In case of fire: Wear self-contained breathing apparatus.

---

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. Remove persons to safety.

### 6.2. Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

### 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

### 6.4. Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

---

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advices on safe handling

No special precautionary measures are necessary.

#### Precautions against fire and explosion

Usual measures for fire prevention.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep container tightly closed. storage temperature: 2 - 8 °C

#### Hints on joint storage

Keep away from food, drink and animal feedingstuffs.

**Storage class:** 10-13

### 7.3. Specific end use(s)

The uses are provided in Section 1.2. Other uses are not recommended unless an assessment is completed, prior to commencement of that use, which demonstrates that the use will be controlled.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limit value

Substance:	CAS-No.:	Source :	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m <sup>3</sup> ]	Limitation of exposure peaks:	Remark:

#### Substance with a common (EC) occupational exposure limit value

Substance:	CAS-No.:	Source :	Occupational exposure limit value:[ppm]	Occupational exposure limit value:[mg/m <sup>3</sup> ]	Limitation of exposure peaks:	Remark:

#### DNEL-/PNEC-values

##### DNEL value

Substance:	CAS-No.:	DNEL/DMEL

##### PNEC Value

Substance:	CAS-No.:	PNEC

#### Remark:

none

### 8.2. Exposure controls

#### Occupational exposure controls

Provide adequate ventilation as well as local exhaustion at critical locations.

#### General protection and hygiene measures

When using do not eat, drink, smoke, sniff. Wash hands before breaks and after work. Apply skin care products after work. Wash contaminated clothing prior to re-use.

#### Personal protection equipment

##### Respiratory protection

Respiratory protection necessary at: insufficient ventilation. Suitable respiratory protection apparatus: Filtering device (full mask or mouthpiece) with filter: filter respirator (DIN EN 147).

##### Hand protection

The use of resistant protective gloves is recommended. Skin protection creams do not offer as effective protection as protective gloves. Therefore, suitable protective gloves should be preferred as much as possible. Suitable material: No information available. Experience has shown that the following glove materials are suitable for protection against undissolved solids: CR (polychloroprene, chloroprene rubber) NBR (Nitrile rubber) Butyl caoutchouc (butyl rubber) FKM (fluoro rubber) PVC (polyvinyl chloride)

##### Eye/face protection

Tightly sealed safety glasses. Eye glasses with side protection

##### Body protection

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes). Only wear fitting, comfortable and clean protective clothing.

#### Environmental exposure controls

refer to chapter 7. No further action is necessary.

### Consumer exposure controls

refer to chapter 7. No further action is necessary.

### Exposure Scenario

No information available, because for the substance no chemical safety report is required.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Appearance:

Physical state: Liquid

Colour: colourless

Odour: characteristically

Odour threshold: not determined

#### Safety relevant basis data

	Parameter	Value	Unit	Remark
pH:				not determined
Melting point/freezing point:				not determined
Initial boiling point and boiling range:				not determined
Flash point:				not determined
Evaporation rate:				not determined
Flammability (solid, gas):				not determined
Explosive properties:				not determined
Lower flammability or explosive limits:				not determined
Upper flammability or explosive limits:				not determined
Vapour pressure:				not determined
Vapour density:				not determined
Relative density:				not determined
Density:				not determined
Solubility(ies):	:			not determined
Partition coefficient: n-octanol/water:				not determined
Auto-ignition temperature:				not determined
Decomposition temperature:				not determined
Viscosity:				not determined
Metal corrosive properties				not determined
Oxidising properties:				not determined

### 9.2. Other information

Bulk density:				not determined
Water solubility:				not determined
Fat solubility:				not determined
Solvent separation test:				not determined
Solvent content:				not determined

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No known hazardous reactions.

## 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.  
Contains as stabilizer(s): derivatives of methylisothiazolinone (< 0.0025 wt.-%)

## 10.3. Possibility of hazardous reactions

No known hazardous reactions.

## 10.4. Conditions to avoid

heat.

## 10.5. Incompatible materials

Oxidizing agent, Reducing agent, Amines, Mercaptan.

## 10.6. Hazardous decomposition products

No hazardous reaction when handled and stored according to provisions.

---

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

The mixture is not classified as toxic for the purposes of Regulation (EC) No 1272/2008 [GHS] (summation method).

#### Acute toxicity

Substance:	CAS-No.:	Toxicological information
------------	----------	---------------------------

#### Skin corrosion/irritation

May cause irritation.

#### Serious eye damage/irritation

May cause irritation.

#### Respiratory or skin sensitisation

May produce an allergic reaction to the skin and respiratory system.

#### CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

No data available

Germ cell mutagenicity

No data available

Reproductive toxicity

No data available

#### STOT-single exposure

No data available

#### STOT-repeated exposure

No data available

#### Aspiration hazard

May lead to aspiration.

---

## SECTION 12: Ecological information

### 12.1. Toxicity

not determined

## Ecotoxicity

Substance:	CAS-No.:	Ecotoxicity
------------	----------	-------------

### 12.2. Persistence and degradability

not determined

### 12.3. Bioaccumulative potential

not determined

### 12.4. Mobility in soil

not determined

### 12.5. Results of PBT and vPvB assessment

not determined

### 12.6. Other adverse effects

slightly hazardous to water (WGK 1) Self-classification (mixture; calculation rule). The mixture is not classified as dangerous for the environment within the meaning of Regulation (EC) No. 1272/2008 [GHS] (summation method).

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Appropriate disposal/Product:

Dispose of waste according to applicable legislation.

#### Appropriate disposal / Package:

Non-contaminated packages may be recycled. Handle contaminated packages in the same way as the substance itself.

#### List of proposed waste codes/waste designations in accordance with EWC

According to EAKV, allocation of waste identity numbers/waste descriptions must be carried out in a specific way for every industry and process.

#### Waste code product:

#### Waste code packaging:

## SECTION 14: Transport information

### 14.1. UN number

UN No.: none

### 14.2. UN proper shipping name

#### ADR / RID

No dangerous good in sense of these transport regulations.

#### IMDG / ICAO-TI / IATA-DGR

No dangerous good in sense of these transport regulations.

### 14.3. Transport hazard class(es)

Hazard label(s):: none

Classification Code:

none

#### 14.4. Packing group

Packing Group: none

#### 14.5. Environmental hazards

Labelling environmentally hazardous substances

ADR/RID / IMDG-Code / ICAO-TI / IATA-DGR:  yes /  no

Marine Pollutant:  yes /  no

#### 14.6. Special precautions for user

Land transport (ADR/RID)

Transport category: none

Special provisions: none

Tunnel restriction code: none

Limited quantity (LQ): none

Sea transport (IMDG)

EmS-No: none

Special provisions: none

Limited quantity (LQ): none

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Remark: none

---

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### EU legislation

Regulation (EC) No 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register:  
not relevant

Regulation (EC) No 1005/2009 on substance that deplete the ozone layer:  
not relevant

Regulation (EC) No 648/2004 on detergents:  
not relevant

Regulation (EC) No 850/2004 on persistent organic pollutants:  
not relevant

Regulation (EU) No 649/2012 concerning the export and import of dangerous chemicals:  
not relevant

Restrictions according to Title VIII of Regulation (EC) No 1907/2006:  
not relevant

##### National regulations

Observe in addition any national regulations!

#### 15.2. Chemical Safety Assessment

A chemical safety assessment has been carried out for this substance: -

For this substance a chemical safety assessment is not required.



## SECTION 16: Other information

### Relevant H- and EUH-phrases (Number and full text)

#### Hazard statements

-

### Training advice

none

### Recommended restrictions of use

refer to chapter 1.

### Further information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

### Documentation of changes

none

### Key literature references and sources for data

Information comes from reference works, the literature or safety data sheets of the components.

### Abbreviations and acronyms

AC: Artikelkategorie (Article Category)

ACGIH: Rat für Arbeitsschutz und Gefahrstoffe, Amerika (American Conference of Government Industrial Hygienists)

ADN: Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf Binnengewässern (Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)

ADR: Europäisches Übereinkommen über die internationale Beförderung gefährlicher Güter auf der Straße (Accord européen relatif transport des marchandises dangereuses par route)

AGW: Arbeitsplatzgrenzwert

AOX: Adsorbierbare organisch gebundene Halogene (Adsorbable Organic halogen compounds)

Bw: Körpergewicht (Body weight)

CLP: Einstufung, Kennzeichnung und Verpackung (Classification, Labelling and Packaging)

CMR: Stoffe klassifiziert als Krebs erzeugend, Mutagen oder Reproduktionstoxisch (Carcinogenic, Mutagenic, toxic for Reproduction)

CSR: Stoffsicherheitsbericht (Chemical Safety Report)

DIN: Deutsches Institut für Normung / Deutsche Industrienorm

DNEL: Grenzwert, unterhalb dessen der Stoff keine Wirkung ausübt (Derived No Effect Level)

DPD: Zubereitungsrichtlinie / Richtlinie 1999-45-EC (Dangerous Preparations Directive)

DSD: Stoffrichtlinie / Richtlinie 67-548-EC (Dangerous Substances Directive)

DU: Nachgeschalteter Anwender (Downstream User)

EC50: Wirksame Konzentration 50% (Effective Concentration 50%)

ECHA: Europäische Chemikalienagentur

EN: Europäische Norm

EWC/EWL: Europäischer Abfallartenkatalog (European Waste Catalogue)

GHS: Weltweit harmonisiertes System zur Einstufung und Kennzeichnung von Stoffen und Gemischen (Globally Harmonised System of Classification, Labelling and Packaging of Chemicals)

IATA: Verband für den internationalen Lufttransport (International Air Transport Association)

IBC: Großpackmittel (Intermediate Bulk Container)

ICAO: Internationale Zivilluftfahrt-Organisation (International Civil Aviation Organization)

IMDG Code: Gefahrgutvorschriften für den internationalen Seetransport (International Maritime Dangerous Goods Code)

IMO: Internationale Seeschiffahrts-Organisation (International Maritime Organization)

ISO: Internationale Normungsorganisation (International Standards Organisation)

IUPAC: International Vereinigung für reine angewandte Chemie (International Union for Pure Applied Chemistry)

LC50: Lethale (Tödliche) Konzentration 50%

LD50: Lethale (Tödliche) Dosis 50%

LEV: Lokale Absaugung (Local exhaust ventilation)

MAK: Maximale Arbeitsplatzkonzentration – DFG

n.a.: nicht anwendbar

n.b.: nicht bestimmt

OEL: Arbeitsplatzgrenzwert (Occupational Exposure Limit)

PBT: persistent, bioakkumulierbar, giftig (persistent, bioaccumulative, toxic)

PNEC: Abgeschätzte Nicht-Effekt-Konzentration (Predicted No Effect Concentration)

PPE/PSA: Persönliche Schutzausrüstung (Personal Protective Equipment)

REACH: Registrierung, Bewertung und Zulassung von Chemikalien (Registration, Evaluation and Authorization of Chemicals)

RID: Gefahrgutvorschriften für den Transport mit der Eisenbahn (Règlement International concernant le transport de marchandises dangereuses par chemin de fer)

STEL: Grenzwert für Kurzzeitexposition (Short-term Exposure Limit)

SVHC: Stoff sehr hoher Besorgnis (Substance of Very High Concern)

TLV: Arbeitsplatzgrenzwert (Threshold Limit Value)

VOC: Flüchtige organische Kohlenwasserstoffe (Volatile Organic Compounds)

vPvB: sehr persistent, sehr bioakkumulierbar (very persistent, very bioaccumulative)

---