

Agilent Technologies

Kit Name: AdvanceBio β-N-Acetylhexosaminidase

Kit PN: GK80050

This product is a multi-level kit, composed of the following modules and individual chemical components:

Kit Components

Kit Component Part Number	Kit Component Name	Qty
GK80050	AdvanceBio β -N-Acetylhexosaminidase, 1.6 Unit(40 μ l)	1 Vial
WS0059	5x Reaction Buffer A, 1 ml	1 Vial

SDSs for each component follow this cover sheet.

Transportation Information for the Kit:

Proper Shipping Names:

DOT	ΙΑΤΑ/ΙCΑΟ	China
Not Regulated	Not Regulated	Not Regulated



Revision Date: 09.10.2020

Issue Date: 21.11.2019

1 Identification of the substance/mixture and of the company/undertaking

- Product identifier
- Trade name: AdvanceBio β-N-Acetylhexosaminidase
- · Article number: GK80050
- Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use
- Details of the supplier of the safety data sheet
- **Manufacturer/Supplier:** Agilent Technologies Manufacturing GmbH & Co. KG Hewlett-Packard-Str. 8
- 76337 Waldbronn Germany
- Email: pdl-msds author@agilent.com
- Phone number: 0800 603 1000

• Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- Classification of the substance or mixture
 Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.
- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- Other hazards
- [•] Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- [•] Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.
- · Dangerous components: Void
- * Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

- [•] Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.

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- After swallowing: If symptoms persist consult doctor.
- · Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective gloves / eye protection / face protection.
- · Environmental precautions: Dilute with plenty of water.
- Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- Reference to other sections
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- · Handling:
- · Precautions for safe handling Wear protective gloves / eye protection / face protection.
- · Information about fire and explosion protection: No special measures required.
- Conditions for safe storage, including any incompatibilities
- Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- Further information about storage conditions: None.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

- Additional information about design of technical facilities: No further data; see item 7.
- Control parameters
- Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace. • Additional information: The lists valid during the making were used as basis.

• Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.

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· Respiratory protection: Not required.

Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves Wear suitable gloves.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection: Wear eye protection / face protection.

Information on basic physical and ch	emical properties	
General Information		
Appearance:		
Form:	Liquid	
Colour:	Clear	
· Odour: · Odour threshold:	Nearly odourless	
	Not determined.	
[·] pH-value at 20 °C:	7.5	
[•] Change in condition		
Melting point/freezing point:	0°0	
Initial boiling point and boiling range:	100 °C	
Flash point:	Not applicable.	
Flammability (solid, gas):	Not applicable.	
Decomposition temperature:	Not determined.	
Auto-ignition temperature:	Product is not selfigniting.	
Explosive properties:	Product does not present an explosion hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapour pressure at 20 °C:	23 hPa	
Density at 20 °C:	1 g/cm ³	
· Relative density	Not determined.	
· Vapour density	Not determined.	
Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
water:	Fully miscible.	
Partition coefficient: n-octanol/water	Not determined.	
Viscosity:		
Dynamic at 20 °C:	0.952 mPas	
Kinematic:	Not determined.	
Solvent content:		
Water:	99.4 %	
Solids content:	0.7 %	
		(Contd. on page

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Trade name: AdvanceBio β-N-Acetylhexosaminidase

[•] Other information

No further relevant information available.

10 Stability and reactivity

- · Reactivity No further relevant information available.
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- · Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- · Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes: Not hazardous for water.
- [•] Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- **vPvB:** Not applicable.
- Other adverse effects No further relevant information available.

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13 Disposal considerations

· Waste treatment methods

• **Recommendation** Dispose of contents/container in accordance with local/regional/national/international regulations.

· Uncleaned packaging:

• **Recommendation:** Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

14 Transport information	
· UN-Number	
· ADR, ADN, IMDG, IATA	not regulated
UN proper shipping name	
· ADR, ADN, IMDG, IATA	not regulated
 Transport hazard class(es) 	
· ADR, ADN, IMDG, IATA	
Class	not regulated
· Packing group	
· ADR, IMDG, IATA	not regulated
· Environmental hazards:	Not applicable.
Special precautions for user	Not applicable.
• Transport in bulk according to Annex II of Marpol an	d
the IBC Code	Not applicable.
· UN "Model Regulation":	not regulated

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

[·] Directive 2012/18/EU

· Named dangerous substances - ANNEX I None of the ingredients is listed.

 DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.



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1 Identification of the substance/mixture and of the company/undertaking

- Product identifier
- Trade name: 5x Reaction Buffer A
- · Article number: WS0059
- Relevant identified uses of the substance or mixture and uses advised against
- · Application of the substance / the mixture Reagents and Standards for Analytical Chemical Laboratory Use
- Details of the supplier of the safety data sheet
- Manufacturer/Supplier: Agilent Technologies Manufacturing GmbH & Co. KG Hewlett-Packard-Str. 8 76337 Waldbronn Germany
- Email: pdl-msds_author@agilent.com
- · Phone number: 0800 603 1000

• Emergency telephone number: CHEMTREC®: +(44)-870-8200418

2 Hazards identification

- Classification of the substance or mixture
 Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.
- · Label elements
- · Labelling according to Regulation (EC) No 1272/2008 Void
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- Other hazards
- [•] Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterisation: Mixtures
- Description: Mixture of substances listed below with nonhazardous additions.
- · Dangerous components: Void
- * Additional information: For the wording of the listed hazard phrases refer to section 16.

4 First aid measures

- Description of first aid measures
- · General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.

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Trade name: 5x Reaction Buffer A

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- After swallowing: If symptoms persist consult doctor.
- [·] Information for doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- · Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Firefighting measures

- Extinguishing media
- Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- Special hazards arising from the substance or mixture No further relevant information available.
- Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures Wear protective gloves / eye protection / face protection.
- Environmental precautions:
- Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

- Reference to other sections
- See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

- Handling:
- · Precautions for safe handling Wear protective gloves / eye protection / face protection.
- Information about fire and explosion protection: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- Storage:
- · Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: None.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical facilities: No further data; see item 7.

· Control parameters

Ingredients with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: The lists valid during the making were used as basis.

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Trade name: 5x Reaction Buffer A

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Issue Date: 21.11.2019

- Exposure controls
- Personal protective equipment:
- General protective and hygienic measures: The usual precautionary measures are to be adhered to when handling chemicals.
- Respiratory protection: Not required.
- Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

- Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- · Material of gloves Wear suitable gloves.
- **Penetration time of glove material** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Wear eye protection / face protection.

Information on basic physical and chemical properties General Information Appearance: Form: Liquid Colour: Colourless Odour: Characteristic Odour threshold: Not determined. PH-value at 20 °C: 7 Change in condition 0 °C Melting point/freezing point: 0 °C Initial boiling point and boiling range: 100 °C Flash point: Not applicable. Flash point: Not determined. Auto-ignition temperature: Not determined. Auto-ignition temperature: Product does not present an explosion hazard. Explosion limits: Lower: Lower: Not determined. Vapour pressure at 20 °C: 23 hPa	
Form:LiquidColour:ColourlessOdour:CharacteristicOdour threshold:Not determined.PH-value at 20 °C:7Change in condition Melting point/freezing point:0 °C 100 °CInitial boiling point and boiling range:100 °CFlash point:Not applicable.Flammability (solid, gas):Not applicable.Decomposition temperature:Not determined.Auto-ignition temperature:Product is not selfigniting.Explosive properties:Product os not present an explosion hazard.Explosion limits: Lower: Upper:Not determined.Not determined.Not determined.	
Odour: Characteristic Odour threshold: Not determined. PH-value at 20 °C: 7 Change in condition 0 °C Initial boiling point/freezing point: 0 °C Initial boiling point and boiling range: 100 °C Flash point: Not applicable. Flammability (solid, gas): Not applicable. Decomposition temperature: Not determined. Auto-ignition temperature: Product is not selfigniting. Explosive properties: Product does not present an explosion hazard. Explosion limits: Not determined. Lower: Not determined. Upper: Not determined.	
Odour threshold: Not determined. PH-value at 20 °C: 7 Change in condition Melting point/freezing point: 0 °C Initial boiling point and boiling range: 100 °C Flash point: Not applicable. Flammability (solid, gas): Not applicable. Decomposition temperature: Not determined. Auto-ignition temperature: Product is not selfigniting. Explosive properties: Product does not present an explosion hazard. Explosion limits: Not determined. Lower: Not determined. Vot determined. Not determined.	
· pH-value at 20 °C: 7 · Change in condition Melting point/freezing point: 0 °C 100 °C · Flash point: Not applicable. · Flash point: Not applicable. · Flammability (solid, gas): Not applicable. · Decomposition temperature: Not determined. · Auto-ignition temperature: Product is not selfigniting. · Explosive properties: Product does not present an explosion hazard. · Explosion limits: Not determined. Lower: Not determined. · Not determined. Not determined.	
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Flammability (solid, gas): Not applicable. Decomposition temperature: Not determined. Auto-ignition temperature: Product is not selfigniting. Explosive properties: Product does not present an explosion hazard. Explosion limits: Not determined. Lower: Not determined. Upper: Not determined.	
• Decomposition temperature: Not determined. • Auto-ignition temperature: Product is not selfigniting. • Explosive properties: Product does not present an explosion hazard. • Explosion limits: Lower: Lower: Not determined. Upper: Not determined.	
Auto-ignition temperature: Product is not selfigniting. Explosive properties: Product does not present an explosion hazard. Explosion limits: Vot determined. Lower: Not determined. Upper: Not determined.	
• Explosive properties: Product does not present an explosion hazard. • Explosion limits: Lower: Lower: Not determined. Upper: Not determined.	
Explosion limits: Lower: Not determined. Upper: Not determined.	
Lower: Not determined. Upper: Not determined.	
Upper: Not determined.	
· Vapour pressure at 20 °C: 23 hPa	
· Density at 20 °C: 1 g/cm³	
Relative density Not determined.	
 Vapour density Not determined. 	
• Evaporation rate Not determined.	
· Solubility in / Miscibility with	
water: Fully miscible.	
Partition coefficient: n-octanol/water: Not determined.	
· Viscosity:	
Dynamic at 20 °C: 0.952 mPas	
Kinematic: Not determined.	
(Contd. on	age 4)

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Issue Date: 21.11.2019

Trade name: 5x Reaction Buffer A

	(Contd. of pag
· Solvent content:	
Water:	97.0 %
Solids content:	3.0 %
• Other information	No further relevant information available.

10 Stability and reactivity

• Reactivity No further relevant information available.

- Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- Possibility of hazardous reactions No dangerous reactions known.
- Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity Based on available data, the classification criteria are not met.
- Primary irritant effect:
- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure Based on available data, the classification criteria are not met.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- Aspiration hazard Based on available data, the classification criteria are not met.

12 Ecological information

- Toxicity
- Aquatic toxicity: No further relevant information available.
- Persistence and degradability No further relevant information available.
- Behaviour in environmental systems:
- Bioaccumulative potential No further relevant information available.
- Mobility in soil No further relevant information available.
- Additional ecological information:
- General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- [·] Results of PBT and vPvB assessment
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

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Revision Date: 09.10.2020

Trade name: 5x Reaction Buffer A

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· Other adverse effects No further relevant information available.

13 Disposal considerations

· Waste treatment methods

• Recommendation Dispose of contents/container in accordance with local/regional/national/international regulations.

[•] Uncleaned packaging:

• Recommendation: Disposal must be made according to official regulations.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

UN-Number ADR, ADN, IMDG, IATA	not regulated	
UN proper shipping name ADR, ADN, IMDG, IATA	not regulated	
Transport hazard class(es)		
ADR, ADN, IMDG, IATA Class	not regulated	
Packing group ADR, IMDG, IATA	not regulated	
Environmental hazards:	Not applicable.	
Special precautions for user	Not applicable.	
Transport in bulk according to Annex II of	f Marpol and	
the IBC Code	Not applicable.	

15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

Directive 2012/18/EU

• Named dangerous substances - ANNEX I None of the ingredients is listed.

 DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II

None of the ingredients is listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.