

GUZYhm'8UhU'G\YYh'

Version 3.0 SDS Revision Dat www.novusbio.com

%" · = 89BH=: = 75H=CB·C: H<9 GI6GH5B79#A=LHIF9 5B8 C: H<9 7CAD5BM#IB89FH5?=B; %" % Df c Xi Wh = XYbh | Z | Yfg Product Name: ARK 5/N U AK 1 Over expression Lysate Catalog Number: NBL 1-13843 Components: Overexpressi on Lysate Empty Vector Negative Control 2x SDS Sample Buffer (contains SDS) %" & FY`Yj Ubh | J XYbh | Z | YX | i g Yg | c Z | h \ Y | g i Vg h Ub WY | c f | a | l h i f Y | Ub X | i g Yg | UXj | g YX | U [U] b g h | I dentified Uses: For research use only. %"' ' 8 Y h U] `g `c Z ` h \ Y `g i d d `] Y f `c Z ` h \ Y `g U Z Y h m ` X U h U `g \ Y Y h ` Company: Novus Bi ologicals a Bi o-Techne Brand Telephone: 1-888-506-6887 10771 E Easter Ave Fax: 1-303-730-1966 Centennial, CO 80112 USA Internet: www.novusbio.com Email address: novus @novus bio.com Canada: 461 North Service Rd West Telephone: 1-855-668-8722 Unit B37 Fax: 902-827-6402 Oakville, ONL6M2V5Email address: Canada.i nqui ri es @bi o -t echne.co United Kingdom: 19 Barton Lane Telephone: 44 (0)1235 529449 Abingdon Science Park Fax: 44 (0)1235 533420 Abingdon, OX 14 3NB Email address: info.emea@bio-techne.com China: 1193 Changning Road 86-400-821-3475 Telephone: Unit 1901, Raffles Changning Office 76 (021)52371001 Fax: Shanghai.China Email address: techsupport.cn@bio-techne.com %" (' 9 a Y f [Y b Wm ' H Y ` Y d \ c b Y ' B i a V Y f ' Emergency Tel: For chemical emergency, spill, leak, fire,exWpiotshuimeU, ωSr. 148600 €262e82e06 W ccrallotwc HeEMatTHF76E3CF7#412e55006 r nig Bi o-Techne Tel:US:612-379-2956 or 800-343-7475/Europe:+44(0)1235-529449/Chi na 86-400-821-3475 &" . < 5 N 5 F 8 G = 8 9 B H = : = 7 5 H = C B&" % $^{\cdot}$ 7 $^{\cdot}$ Ugg] Z] WUh] c b $^{\cdot}$ c Z $^{\cdot}$ h \ Y $^{\cdot}$ gi VghUb WY $^{\cdot}$ c f $^{\cdot}$ a] l hi f Y $^{\cdot}$ 7`Ugg]Z]WUh]cb`UWWcfX]b[`hc`FY[i`Uh]cb`fl97L`Bc`%&+&#&\$\$, `O; < G#7@DQ`cf`&-`7:F`%-%\$"%&\$\$, `Warder of the control of the coSkin Corrosion/Irritation - Category 2 Serious Eye Damage/Eye Irritation - Category 2 &" &' @UVY` '9 `YaYbhg' @~U~V~Y~`~]~b~[~`~U~WWc~f~X]~b~[~`~h~c~`~F~Y~[~i~`~U~h~]~c~b~`~fl~9~7~L~`~B~c~`~%&+~&#~&~S~S~,~`~O;~<~G~#~7~@~D~Q~`~S~G~#~7~~g~D~Q~.Pictogram(s):

Signal Word: Warning Hazard

Statement (s):

H315 Causes skinirritation.

Causes serious eyeirritation.

Precautionary Statement (s):

P 264 Wash hands thoroughly after handling

P 280 Wear protective gloves, protective clothing/eye protection/face protection.

P 302+P 352 I FON SKI N: Wash with plenty of soap and water

P 305+P 351+P 338 I FI N EYES:Rinse cautious I y with water for several minutes.Remove contact I ens P 332+P 313 If skinirritation occurs, get medical advice/attention.

P 337+P 313 If eyeirritation persists, get medical advice/attention. P 362+P 364 Take off contaminated clothing and washit before reuse.

&" ' ' $C h \setminus Y f$ ' < U n U f X g '

7 C A D C G = H = C B # = B : C F A 5 H = C B · C B · = B : F 9 8 = 9 B H G · $^{\prime}$ " % $^{\cdot}$ G i V g h U b WY g $^{\cdot}$ Sodi um Dodecyl Sulfate " & Allhif Yg 7 c a d c b Y b h 75G'Bc" 97 Bc" = b XYl · Bc " · 7 ` Ugg] Z] WUh] c b Sodi um Dodecyl Sulfate 151-21-3 205-788-1 < 109 (" : = FGH : 5 = 8 : A95GIF9G : $(\ \ "\ \%\ '\ 8\ Y\ g\ Wf\]\ d\ h\]\ c\ b\ '\ c\ Z\ '\ Z\]\ f\ g\ h\ '\ U\]\ X\ '\ a\ Y\ U\ g\ i\ f\ Y\ g\ '$; YbYf U` 5 Xj] WY ' Consult a doctor and showthis safety data sheet. $= Z \cdot = b \setminus U \cdot YX$ Remove to fresh air and monitor breathing. If breathing becomes difficult, give oxygen. If breathi $= b \cdot 7 U g Y \cdot c Z \cdot G_{-} \mid b \cdot 7 c b h U Wh \cdot$ I mmediately wash skin with copious amounts of soap and water for at I east 15 minutes. Remove contam = b · 7 U g Y · c Z · 9 mY · 7 c b h U Wh · Flush with copious amounts of water for at least 15 minutes. Remove contact lenses if easy to do so. Co $= Z \cdot G k U \cdot c k Y X$ Rinse mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never ("&' Acgh'] adcf hUbh'gmadhcag'UbX'YZZYWhgž'Vch\'UWihY'UbX'XY`UmYX' $= b \setminus U \setminus U h \mid c b$ Material may be irritating to the mucous membranes and upper respiratory tract. G] b . . Causes skinirritation. 9 mY gCauses eye irritation. = b [Ygh] cb. May be har mful if ingested. ("' ' = b X] WUh] c b ' c Z '] a a Y X] Uh Y ' a Y X] WU` ' Uh h Y b h] c b ' Ub X ' g d Y W] U` ' h f Y Uh a Y b h ' b Y Y X Y X ' Show this safety data sheet to the doctor in attendance. Immediate medical attention is required.) " : = F 9! : = ; < H = B; A 9 5 G I F 9 G) " % · 9 l h] b [i] g \] b [· AYX] U · Gi | hUV`Y'Yl h | b [i | g \] b ['aYX] U' Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.) " & ' G d Y W] U ` ' \ U n U f X g ' U f] g] b [' Z f c a ' h \ Y ' g i V g h U b W Y ' c f ' a] l h i f Y ' Combustible.In case of fire,irritating or toxic fumes or gases may be formed.) " ' · Df YWUi h] cbg · Zcf · Z] f Y! Z] [\ h Y f g · Wear suitable protective clothing to prevent contact with skin and eyes and self-contained breat 577 = 89 B H = 5@ F 9@95G9 A 95GI F 9G *" %' DYfgcbU` dfYWUih]cbgž dfchYWh]jY Yei]daYbh UbX YaYf[YbWm dfcWYXifYg' Do not take action without suitable protective clothing -see section 8 of SDS. Evacuate personnel t or gas. * " & ' 9bj | fcbaYbhU` dfYWUih | cbg ' Do not let product enter drains. * " ' ` AYh\cXg ` UbX ` aUhYf] U ` g ` Zcf ` WcbhU] baYbh ` UbX ` W` YUb] b[' i d ` Cover spillage with suitable absorbent material. Hold all material for appropriate disposal as de * " (` FYZYfYbWY`hc`ch\Yf gYWh]cbg `

+ " < 5 B 8 @ = B; 5 B 8 G H C F 5; 9

+ " % · D f Y WU i h] c b g · Z c f · g U Z Y · \setminus U b X ·] b [·

Avoid inhal ation, contact with eyes, skin and clothing. Use in a well-ventil ated area. Do not eat, drindle and the contact with eyes, skin and clothing. Use in a well-ventil ated area. Do not eat, drindle and a contact with eyes, skin and clothing.

+ " & ' 7 c b X] h] c b g ' Z c f ' g U Z Y ' g h c f U [Y ž '] b W ' i X] b [' U b m '] b Wc a d U h] V] `] h] Y g '

For required PPEsee section 8. For disposal see section 13.

Store in cool, well-ventilated area. Keep container tightly closed in a dry and well-ventilated plaleakage. Do not store in incompatible containers.

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Not applicable.
      9 L D C G I F 9 · 7 C B H F C @ G # D 9 F G C B 5 @ · D F C H 9 7 H = C B ·
, " % · 7 c b h f c ` · d U f U a Y h Y f g ·
      7 c a d c b Y b h g ' k ] h \ ' k c f _ d ` U WY ' Wc b h f c ` ' d U f U a Y h Y f g '
      Contains no substances with occupational exposure limit values.
, "&' 9ldcgifY' Wcbhfc`g
      5 d d f c d f ] U h Y · 9 b [ ] b Y Y f ] b [ · 7 c b h f c ` g ·
      Use in a fume hood where applicable. Ensure all engineering measures described under section 7of S
      eye wash station. Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediat
      DYfgcbU` DfchYWh]jY 9ei]daYbh
      9 \text{ mY} · # · : U \text{ WY} · D \text{ f } c \text{ h Y Wh }] c \text{ b}
      Use appropriate safety glasses.
      G_ | b · Df c h Y Wh | c b ·
      Use appropriate chemical resistant gloves (minimum requirement use standard BS EN 374:2003). Gloves sh
      handling.
      6 c X m Df c
      Wear appropriate protective clothing.
      FYgd] f Uhcfm. DfchYWh]cb
      If risk assessment indicates necessary, use a suitable respirator.
         D < MG = 7.5 @ ... 5 B 8 ... 7 < 9 A = 7.5 @ ... D F C D 9 F H = 9 G ...
- " % ·
         = b Z c f a U h ] c b ` c b ` V U g ] W ` d \ mg ] WU ` ` U b X ` W\ Y a ] WU ` ` d f c d Y f h ] Y g `
      5ddYUfUbWY
                                                                 JUdcf Df Yggif Y
                                                                                              No data available.
                                                                 J U d c f '8 Y b g ] h m'
      CXcf.
                                    Littletonone
                                                                                              No data available.
      CXcf \cdot H \setminus fYg \setminus c \cdot X
                                    No data available.
                                                                 FY`Uh] j Y' 8 Y b g ] h m'
                                                                                              No data available.
                                    No data available.
                                                                 Gc`i V]`]hm'
                                                                                              Soluble
      AY`h]b['#':fYYn]b['DcNjobbataavailable.
                                                                 DUfh]h]cb.7cYZZ]W]YbhNodataavailable.
      6c] `]b[ 'Dc]bh '# 'FUb[YNo dat a available.
                                                                 5 i h c ] [ b ] h ] c b · HYa d Yf UhNiof dat a avail able.
      : ` U g \setminus ` D c ] b h ·
                                    No data available.
                                                                 8 Y Wcadcg]h]cb'HYadYf WhoidfaYta available.
      9j Udcf Uh]cb'FUhY'
                                   No data available.
                                                                 J | g Wc g | h m
                                                                                              No data available
      : `UaaUV]`]hm'flGc`]Xž'NdUglataavailable.
                                                                 91 d ` c Df c d Y
                                                                                              No data available.
      IddYf'#'@ckYf': `UaaUV] `]hm'cf
      9 l d`cg] j Y'@] a l hg'''' No data à vài l à bl è '''' Cl l'X n l'b [ "DfcdYfh] Yg'No data a vai l a bl e .
         · · · · Ch\Yf · gUZYhm · | bZcfaUh | cb ·
      No data available.
% $ " · G H 5 6 = @ = H M · 5 B 8 · F 9 5 7 H = J = H M ·
%S"%FYUWhlilhm
      No data available.
%$"&'7\Ya|WU`'ghUV]`]hm'
      Stable under recommended storage conditions.
% $ " ' 'Dcgg ] V ] ` ] h m ' c Z ' \ Un Uf X c i g ' f Y U Wh ] c b g '
      Hazardous reactions will not occur under normal transport or storage conditions. Decomposition m
%$ " ( '7 c b X ] h ] c b g ' h c ' U j c ] X
      No data available.
% $ " ) '= b Wc a d U h ] V ` Y ' a U h Y f ] U ` g '
      Oxidizing agents.
\% $ " * '< U n U f X c i g ' X Y Wc a d c g ] h ] c b ' d f c X i Wh g '
      Carbon di oxi de, Carbon monoxi de, Sodi u moxi des, Sul fur oxi des.
\%\%" · HCL = 7 C @ C; = 7 5 @ · = B : C F A 5 H = C B
\%\%" % = b Z c f a U h ] c b · c b · h c l ] Wc ` c [ ] WU ` · Y Z Z Y Wh g
      5 WihY Hell Whm
      L D50 Oral - rat - 1,288 mg /kg.
      G_{-}] b · 7 c f f c g ] c b · # · = f f ] h U h ] c b ·
      Causes redness.
      GYf ] cig '9 mY '8 Ua U[Y '# '= ff] h Uh ] cb'
```

+ " ' ' G d Y W] Z] W' Y b X ' i g Y g

```
F Y g d ] f U h c f m ' c f ' G _ ] b ' G Y b g ] h ] n U h ] c b '
      Sorethroat and cough.
      ; Yfa '7Y' ` AihU[Yb]W]hm
      Classified based on available data.
      7 Uf W] bc[Yb] W] hm.
      Classified based on available data.
      FYdfcXiWh]jY'Hcl]W]hm'
      Classified based on available data.
      GdYW] Z] W' HUf [Yh ' Cf [Ub ' Hcl] W] hm'! 'G] b[ `Y '91 dcgifY'
      Classified based on available data.
      GdYW| Z| W HUf [ Yh Cf [ Ub Hcl ] W hm ! FYdYUhYX 9 l dcgifY ...
      Classified based on available data.
      5 g d ] f Uh ] c b < Un Uf X
      Classified based on available data.
      Gmadhcag' #'FcihYg'cZ'9ldcgifY'
      Inhalation: Causes cough and sore throat.
                      Causes abdominal pain, diarrhea, nausea, and vomiting.
      Ingestion:
                      Causes redness and irritation.
      Skin:
      Eves:
                      Causes redness and pain.
      Delayed/Immediate Effects:
      5 XX] h] c b U` · = b Z c f a U h] c b ·
\% &" · 9 7 C @ C; = 7 5 @ · = B : C F A 5 H = C B ·
%&" % 'HcllWIhm'
      No data available.
% & " & 'D Y f g ] g h Y b WY ' U b X ' X Y [ f U X U V ] ` ] h m '
      No data available.
%&" ' '6] c ' U W W a i ` U h ] j Y ' d c h Y b h ] U ` '
     No data available.
%&" ( 'AcV] ` ] hm' ] b ' gc] ` '
      No data available.
\%\&" ) 'F Y g i ` h g ' c Z ' D 6 H ' U b X ' j D j 6 ' U g g Y g g a Y b h '
      No data available.
%&" * 'C h \ Y f ' U X j Y f g Y ' Y Z Z Y Wh g '
     No data available.
\%' " \cdot 8 = G D C G 5 @ \cdot 7 C B G = 8 9 F 5 H = C B G \cdot
%' " % 'K U g h Y ' h f Y U h a Y b h ' a Y h \ c X g '
      DfcXiWh
      Transfer to a suitable container and arrange for collection by specialized disposal company in a
      7 c b h U a ] b U h Y X · D U W_ U [ ] b [ ·
      Dispose of in a regulated landfill site or other method for hazardous or toxic wastes in accordanc
      GdYW|U`DfYWUih]cbg
      Dispose of small amounts of spilled material as described in section 6. Large spills must be dealt w
      waterways, drains, and sewers.
```

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, I

Does not meet the criteria for classification as hazardous for transport.

Does not meet the criteria for classification as hazardous for transport.

Does not meet the criteria for classification as hazardous for transport.

Redness and pain.

%(" ' HF 5 B G D C F H ' = B : C F A 5 H = C B '

%(" & I B df cdYf g \ dd b [b UaY .

%("' 'Hf Ubgdcfh'\UnUfX'W'UggflYgŁ'

%(" % 'I B! Bi a V Y f '

%(" ('DUW_U[] b[' [f c i d '

Does not meet the criteria for classification as hazardous for transport.

%(") '9 b j] f c b a Y b h U` \ U n U f X g

Does not meet the criteria for classification as hazardous for transport.

%(" * 'GdYW] U` 'dfYWUih] cbg' Zcf'igYfg'

Does not meet the criteria for classification as hazardous for transport.

5 X X] h | c b U ` ' H f U b g d c f h ' = b Z c f a U h | c b '

Does not meet the criteria for classification as hazardous for transport.

%) " F 9; I @ 5 H C F M = B : C F A 5 H = C B

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010.

 $HG75 \cdot flHcl]W\cdot GiVghUbSWbYdgiu7nnc Doohdfecc`y`!5\,SWhILfateislisted.$

G5F5 'N%o't.applicable.

G5F5 ' ' % %N#b't %a&p p'licable.

79F7@5 FYdcfhUVNoYt Ezip No bih¢ abanlė.

7 U`]Zcfb]U`DfNcodtcagp|phl]icobaib*l)e.

%) " & '7 \ Y a] WU` ' g U Z Y h m' U g g Y g g a Y b h

A Chemical Safety Assessment has not been made for this product.

%* " · C H < 9 F · = B : C F A 5 H = C B ·

: $i f h \setminus Y f = b Z c f a U h | c b$

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This company shall not be held liable for any damage resulting from handling or from contact with experienced scientists in appropriately equipped and authorized facilities. The above informat used as a guide only for experienced personnel. Always consult your safety advisor and follow appropriately under any circumstance, be taken to mean that no hazard exists.

End of safety data sheet.