# **Product Datasheet**

# Cytochrome c Antibody (SPM389) [Alexa Fluor® 750] NBP2-47692AF750

Unit Size: 0.1 ml

Store at 4C in the dark.

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## NBP2-47692AF750

Cytochrome c Antibody (SPM389) [Alexa Fluor® 750]

Unit Size	Cytochrome c Antibody (SPINI389) [Alexa Fluor® 750]	
Please see the vial label for concentration. If unlisted please contact technical services.	Product Information	
Storage Store at 4C in the dark.  Clonality Monoclonal  Clone SPM389  Preservative 0.05% Sodium Azide  Isotype IgG2b Kappa  Conjugate Alexa Fluor 750  Purity Protein A or G purified  Buffer 50mM Sodium Borate  Product Description  Host Mouse  Gene ID 54205  Gene Symbol CYCS  Species Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon  Reactivity Notes Frog  Marker Mitochondrial Marker  Specificity/Sensitivity  It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammallan cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome c is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bcl-2 has been shown to prevent the translocation of cytochrome c thron the release of cytochrome c and to induce cell death. The release of cytochrome c from the mitochondria is thought to trigger an apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This monoclonal antibody recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the cytosol without heme attached).  Immunogen	Unit Size	0.1 ml
Clonality Monoclonal Clone SPM389  Preservative 0.05% Sodium Azide Isotype IgG2b Kappa Conjugate Alexa Fluor 750  Purity Protein A or G purified Buffer 50mM Sodium Borate  Product Description Host Mouse Gene ID 54205 Gene Symbol CYCS Species Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon Reactivity Notes Frog Marker Mitochondrial Marker  Specificity/Sensitivity  It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome is required for activation of caspase-3 (CPP32). Overexpression of Bcl-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process.  Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome c and to induce cell death. The release of cytochrome c cheavage of caspase-9 in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This monoclonal antibody recognizes total cytochrome C which includes both apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome (i.e. cytochrome in the cytosol without heme attached) and holocytochrome (i.e. cytochrome in the mitochondria with heme attached).  Immunogen	Concentration	
Clone SPM389  Preservative 0.05% Sodium Azide  Isotype IgG2b Kappa  Conjugate Alexa Fluor 750  Purity Protein A or G purified  Buffer 50mM Sodium Borate  Product Description  Host Mouse  Gene ID 54205  Gene Symbol CYCS  Species Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon  Reactivity Notes Frog  Marker Mitochondrial Marker  Specificity/Sensitivity It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all alerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome c is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bct-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process. Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome c for activation of caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This monoclonal antibody recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the cytosol without heme attached) and holocytochrome (i.e. cytochrome in the mitochondria with heme attached).  Immunogen	Storage	Store at 4C in the dark.
Preservative   IgG2b Kappa   IgG2b Kappa   IgG2b Kappa   Alexa Fluor 750	Clonality	Monoclonal
Isotype IgGzb Kappa Conjugate Alexa Fluor 750 Purity Protein A or G purified Buffer 50mM Sodium Borate  Product Description Host Mouse Gene ID 54205 Gene Symbol CYCS Species Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon Reactivity Notes Frog Marker Mitochondrial Marker Specificity/Sensitivity It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome c is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bcl-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process. Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome c from the mitochondria is thought to trigger an apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This monoclonal antibod recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the cytosol without heme attached) and holocytochrome (i.e. cytochrome in the mitochondria with heme attached).  Immunogen	Clone	SPM389
Conjugate  Alexa Fluor 750  Purity  Protein A or G purified  Buffer  50mM Sodium Borate  Product Description  Host  Mouse  Gene ID  54205  Gene Symbol  CYCS  Species  Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon  Reactivity Notes  Frog  Marker  Mitochondrial Marker  Specificity/Sensitivity  It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bcl-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process. Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome te mitochondria is thought to trigger an apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This monoclonal antibody recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the cytosol without heme attached) and holocytochrome (i.e. cytochrome in the mitochondria with heme attached).  Immunogen	Preservative	0.05% Sodium Azide
Purity Protein A or G purified  Buffer 50mM Sodium Borate  Product Description  Host Mouse  Gene ID 54205  Gene Symbol CYCS  Species Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon  Reactivity Notes Frog  Marker Mitochondrial Marker  Specificity/Sensitivity It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bct-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process. Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome c from the mitochondria is thought to trigger an apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This monoclonal antibody recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the cytosol without heme attached) and holocytochrome (i.e. cytochrome in the mitochondria with heme attached).  Immunogen	Isotype	IgG2b Kappa
Buffer 50mM Sodium Borate  Product Description  Host Mouse  Gene ID 54205  Gene Symbol CYCS  Species Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon  Reactivity Notes Frog  Marker Mitochondrial Marker  Specificity/Sensitivity It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome c is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bcl-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process.  Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome c from the mitochondria is thought to trigger an apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This monoclonal antibody recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the cytosol without heme attached) and holocytochrome (i.e. cytochrome in the mitochondria with heme attached).  Immunogen	Conjugate	Alexa Fluor 750
Product Description  Host Mouse  Gene ID 54205  Gene Symbol CYCS  Species Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon  Reactivity Notes Frog  Marker Mitochondrial Marker  Specificity/Sensitivity It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome c is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bol-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process. Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome c from the mitochondria is thought to trigger an apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This monoclonal antibody recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the cytosol without heme attached) and holocytochrome (i.e. cytochrome in the mitochondria with heme attached).  Immunogen	Purity	Protein A or G purified
Host   Mouse	Buffer	50mM Sodium Borate
Gene Symbol CYCS Species Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon Reactivity Notes Frog Mitochondrial Marker Specificity/Sensitivity  It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome c is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bcl-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process. Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome c from the mitochondria is thought to trigger an apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This monoclonal antibody recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the mitochondria with heme attached) and holocytochrome (i.e. cytochrome in the mitochondria with heme attached).  Immunogen Synthetic peptides corresponding to amino acid 1-80, 81-104 and 66-104 of	Product Description	
Gene Symbol  CYCS  Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon  Reactivity Notes  Frog  Mitochondrial Marker  Specificity/Sensitivity  It recognizes an epitope within amino acids 93-104 of pigeon Cytochrome C, a well-characterized mobile electron transport protein that is essential to energy conversion in all aerobic organisms. In mammalian cells, this highly conserved protein is normally localized to the mitochondrial inter-membrane space. More recent studies have identified cytosolic cytochrome c as a factor necessary for activation of apoptosis. During apoptosis, cytochrome c is trans-located from the mitochondrial membrane to the cytosol, where it is required for activation of caspase-3 (CPP32). Overexpression of Bcl-2 has been shown to prevent the translocation of cytochrome c, thereby blocking the apoptotic process. Overexpression of Bax has been shown to induce the release of cytochrome c and to induce cell death. The release of cytochrome c from the mitochondria is thought to trigger an apoptotic cascade, whereby Apaf-1 binds to Apaf-3 (caspase-9) in a cytochrome c-dependent manner, leading to caspase-9 cleavage of caspase-3. This monoclonal antibody recognizes total cytochrome C which includes both apocytochrome (i.e. cytochrome in the cytosol without heme attached) and holocytochrome (i.e. cytochrome in the mitochondria with heme attached).  Immunogen  Synthetic peptides corresponding to amino acid 1-80, 81-104 and 66-104 of	Host	Mouse
Species   Human, Mouse, Rat, Amphibian, Canine, Drosophila, Equine, Pigeon	Gene ID	54205
Reactivity Notes   Frog	Gene Symbol	CYCS
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	Immunogen	



#### Notes

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<b>Product Application Details</b>	
Applications	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin
Application Notes	Optimal dilution of this antibody should be experimentally determined.





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### Products Related to NBP2-47692AF750

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750]

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MCTC0 Cytochrome c [HRP]

AF835 Caspase-3 Antibody [Unconjugated] - Active

#### Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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