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Product Datasheet

HiDi® Taq DNA polymerase
#9201

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Product Name	HiDi® Taq DNA polymerase
Catalog Number	#9201

Description

HiDi® stands for **Hi**gh **Di**scrimination of mismatches at the 3’-terminus of primers in PCR. This enzyme family is optimized for this feature and is the first choice for applications that rely on this property such as allele-specific PCR (asPCR), also known as allele-specific amplification (ASA).

Comparison studies with competitor products show that the HiDi® Taq DNA polymerase family is the first choice for highly selective PCRs, such as genotyping by allele-specific PCR, HLA genotyping, analysis of single CpG methylation sites or the detection of mutations in a high background of wild-type sequences.

By using HiDi® Taq DNA polymerase, less than 10 copies of a mutation can be detected in a background of >10,000 wild-type copies without any other tedious assay optimization.

Applications:

- Allele-specific PCR (asPCR), allele-specific amplification (ASA)

- HLA genotyping

- Analysis of single CpG methylation sites by PCR (methylation specific PCR, MSP)

- Mutation detection by PCR even in a high background of wild-type sequences

- Genotyping e.g., in CRISPR/Cas and TALEN approaches

This DNA polymerase is also available as **a nuclease deficient variant**, featuring higher robustness towards potential PCR inhibitors and compatibility with real-time dyes.

Several independently conducted studies show that HiDi® Taq DNA polymerase is ideally suited for use in asPCR in numerous research areas ranging from mutation detection to genome editing. Please see "References" below.

For research use and further manufacturing. Designed and manufactured under ISO13485

Tested Applications	End-Point, Real-Time
Brand	myPOLS Biotec
Storage	-20°C

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References

Lifestyle-specific S-nitrosylation of protein cysteine thiols regulates Escherichia coli biofilm formation and resistance to oxidative stress.
Barraud N, Létoffé S, Beloin C, Vinh J, Chiappetta G, Ghigo JM.NPJ Biofilms Microbiomes. 2021 Apr 13;7(1):34.
Link to publication:
https://doi.org/10.1038/s41522-021-00203-w

Primordial Germ Cell Migration and Histological and Molecular Characterization of Gonadal Differentiation in Pachón Cavefish Astyanax mexicanus
Imarazene B, Beille S, Jouanno E, Branthone A, Thermes V, Thomas M, Herpin A, Rétaux S, Guiguen Y
Sex Dev. 2021 Mar 10;1-18.
Link to publication: **https://doi.org/10.1159/000513378**

Emergence of artemisinin-resistant Plasmodium falciparum with kelch13 C580Y mutations on the island of New Guinea.
Miotto O, Sekihara M, Tachibana SI, Yamauchi M, Pearson RD, Amato R, Gonçalves S, Mehra S, Noviyanti R, Marfurt J, Auburn S, Price RN, Mueller I, Ikeda M, Mori T, Hirai M, Tavul L, Hetzel MW, Laman M, Barry AE, Ringwald P, Ohashi J, Hombhanje F, Kwiatkowski DP, Mita T.
PLoS Pathog. 2020 Dec 15;16(12):e1009133.
Link to publication:
https://doi.org/10.1371/journal.ppat.1009133

Rapid repair of human disease-specific single-nucleotide variants by One-SHOT genome editing.
Yokouchi Y, Suzuki S, Ohtsuki N, Yamamoto K, Noguchi S, Soejima Y, Goto M, Ishioka K, Nakamura I, Suzuki S, Takenoshita S, Era T.
Sci Rep. 2020 Aug 18;10(1):13927.
Link to publication:
https://doi.org/10.1038/s41598-020-70401-7

Development of sake yeast haploid set with diverse brewing properties using sake yeast strain Hiroshima no. 6 exhibiting sexual reproduction.
Yamasaki R, Goshima T, Oba K, Kanai M, Ohdoi R, Hirata D, Akao T.
J Biosci Bioeng. 2020 Jun;129(6):706-714.
Link to publication:
https://doi.org/10.1016/j.jbiosc.2020.01.005

Influence of EGFR-activating mutations on sensitivity to tyrosine kinase inhibitors in a KRAS mutant non-small cell lung cancer cell line.
Tsukumo Y, Naito M, Suzuki T.
PLoS One. 2020 Mar 4;15(3):e0229712.
Link to publication:
https://doi.org/10.1371/journal.pone.0229712

Eliminating primer dimers and improving SNP detection using self-avoiding molecular recognition systems.
Yang Z, Le JT, Hutter D, Bradley KM, Overton BR, McLendon C, Benner SA.
Biol Methods Protoc. 2020 Feb 10;5(1):bpaa004.
Link to publication:
https://doi.org/10.1093/biomethods/bpaa004

Compensation of Disabled Organogeneses in Genetically Modified Pig Fetuses by Blastocyst Complementation.
Matsunari H, Watanabe M, Hasegawa K, Uchikura A, Nakano K, Umeyama K, Masaki H, Hamanaka S, Yamaguchi T, Nagaya M, Nishinakamura R, Nakauchi H, Nagashima H.
Stem Cell Reports. 2020 Jan 14;14(1):21-33
Link to publication:
https://doi.org/10.1016/j.stemcr.2019.11.008

A New Protocol for the Detection of Sterigmatocystin-producing Aspergillus Section Versicolores Using a High Discrimination Polymerase.
Kubosaki A, Kobayashi N, Watanabe M, Yoshinari T, Takatori K,

Kikuchi Y, Hara-Kudo Y, Terajima J, Sugita-Konishi Y.
Biocontrol Sci. 2020 Jan;25(2):113-118
Link to publication: **https://doi.org/10.4265/bio.25.113**

CRISPR-Cas3 induces broad and unidirectional genome editing in human cells.
Morisaka H, Yoshimi K, Okuzaki Y, Gee P, Kunihiro Y, Sonpho E, Xu H, Sasakawa N, Naito Y, Nakada S, Yamamoto T, Sano S, Hotta A, Takeda J, Mashimo T.
Nat Commun. 2019 Dec 6;10(1):5302
Link to publication:
https://doi.org/10.1038/s41467-019-13226-x

END-phenomenon negative bovine viral diarrhea virus that induces the host's innate immune response supports propagation of BVDVs with different immunological properties.
Shiokawa M, Omatsu T, Katayama Y, Nishine K, Fujimoto Y, Uchiyama S, Kameyama KI, Nagai M, Mizutani T, Sakoda Y, Fukusho A, Aoki H.
Virology. 2019 Dec;538:97-110
Link to publication:
https://doi.org/10.1016/j.virol.2019.09.016

Loss of ALBINO3b Insertase Results in Truncated Light-Harvesting Antenna in Diatoms.
Nymark M, Volpe C, Hafskjold MCG, Kirst H, Serif M, Vadstein O, Bones AM, Melis A, Winge P.
Plant Physiol. 2019 Nov;181(3):1257-1276
Link to publication: **https://doi.org/10.1104/pp.19.00868**

Lhcx proteins provide photoprotection via thermal dissipation of absorbed light in the diatom Phaeodactylum tricornutum.
Buck JM, Sherman J, Bártulos CR, Serif M, Halder M, Henkel J, Falciatore A, Lavaud J, Gorbunov MY, Kroth PG, Falkowski PG, Lepetit B.
Nat Commun. 2019 Sep 13;10(1):4167
Link to publication: **https://doi.org/10.1038/s41467-019-12043-6**

Bindel-PCR: a novel and convenient method for identifying CRISPR/Cas9-induced biallelic mutants through modified PCR using Thermus aquaticus DNA polymerase.
Sakurai T, Kamiyoshi A, Takei N, Watanabe S, Sato M, Shindo T.
Sci Rep. 2019 Jul 9;9(1):9923
Link to publication:
https://doi.org/10.1038/s41598-019-46357-8

A strategy to complement PtAUREO1a in TALEN knockout strains of Phaeodactylum tricornutum
S Madhuri, CR Bártulos, M Serif, B Lepetit, PG Kroth
Algal Research, 2019 May, 101469
Link to publication:
https://doi.org/10.1016/j.algal.2019.101469

GPR31-dependent dendrite protrusion of intestinal CX3CR1+ cells by bacterial metabolites.
Morita N, Umemoto E, Fujita S, Hayashi A, Kikuta J, Kimura I, Haneda T, Imai T, Inoue A, Mimuro H, Maeda Y, Kayama H, Okumura R, Aoki J, Okada N, Kida T, Ishii M, Nabeshima R, Takeda K.
Nature. 2019 Feb;566(7742):110-114
Link to publication:
https://doi.org/10.1038/s41586-019-0884-1

Precise and efficient nucleotide substitution near genomic nick via noncanonical homology-directed repair.
Nakajima K, Zhou Y, Tomita A, Hirade Y, Gurumurthy CB, Nakada S.
Genome Res. 2018 Feb;28(2):223-230
Link to publication: **https://doi.org/10.1101/gr.226027.117**

One-step generation of multiple gene knock-outs in the

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diatom Phaeodactylum tricornutum by DNA-free genome editing.
Serif M, Dubois G, Finoux AL, Teste MA, Jallet D, Daboussi F.
Nat Commun. 2018 Sep 25;9(1):3924
Link to publication:
https://doi.org/10.1038/s41467-018-06378-9

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Content

S pack: 250 U, 5 U/µl, 1 x 50 µl HiDi® Taq DNA polymerase; 1 x 1.25 ml 10x HiDi reaction buffer

M pack: 250 U, 5 U/µl, 1 x 200 µl HiDi® Taq DNA polymerase; 2 x 1.25 ml 10x HiDi reaction buffer